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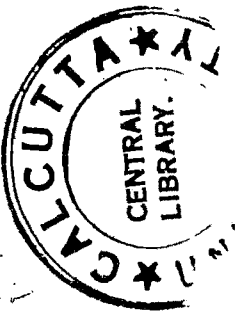


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# EXTRACTS FROM MY UNPUBLISHED AUTOBIOGRAPHY

NRIPENDRA CHANDRA BANERJEE

*Presidency College*

I joined the Presidency College as the youngest man on the staff on 10th April, 1907. I still recollect the events of that day. The Presidency College had then a very high prestige and the prestige was shared by members of the teaching staff. A Presidency College Professor or Lecturer took high rank in the Indian community—forty years ago, the rank was as high as that any succesful member of the lawyer-Barrister High Court aristocracy and not very much below the prestige of a junior member of the I.C.S. For the men were picked men, who might have risen high in any other of the 'black-coated' professions.

It was with mixed feelings of gratification and reserve that I put on my flowing *choga and chapkan*, in which those of us who did not care for European dress, used to attire themselves and presented myself before the Principal's office by 11 a.m. I was taken to Principal Little (he was a very jolly man and an able Professor of Mathematics with a keen sense of humour) by the Head Assistant (who knew me, along with other junior assistants of the office as one of the best scholars of the college) and before this, we already had a private talk inside the office (the Head Assistant and myself) as regards the classes I was to take and we agreed that I had better ask for the B.A. and F.A. classes rather than the M.A. which also had been taken by my predecessor, my old teacher Professor J. N. Dasgupta. Professor Dasgupta had been drafted to the Hooghly College as Principal and the officiating

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vacancy arose in that chain. I was introduced to Mr. Little by the Head Assistant and he was very cordial and put me at ease at once. He asked me if I would be prepared to step into Professor Dasgupta's shoes at once and if I felt myself competent to take all his classes, including the M.A. I gathered my wits about me and told him if it was a question of competence, I felt I was quite ready to lecture to the M.A. students, but would it not be better, I suggested shyly, from the disciplinary point of view, not to put me there, as I had left College only in 1905 and there must be among the M.A. men a pretty good number of old chums (although my juniors) of the Eden Hindu Hostel groups, who might be inclined to take liberties. He agreed and then I suggested that the M.A. classes be transferred to Professor M. Ghosh (one of my old Dacca College teachers, who was now in the Presidency College) and I might be put in for B.A. and F.A. He agreed to this also and wished me good luck. I came to the Professor's sitting-room and here was I given a very loving welcome by all my old teachers, Professor Perceval who was very sparing of words, uttering gruffly only one sentence (" So, you are here ")—it was his recommendation that of course had put me there but my revered Professor was never demonstrative. He had a heart of gold under an unsocial and rough exterior. The college summer recess was very near and if it had been a Commercial College run on very economic lines, my appointment would have materialised from June, the beginning of the next session. I remember to have lectured not more than twice to the 4th year men and these ' maiden ' lectures were on the spirit and evolution of English poetry of the Romantic School and as I would have to teach Palgrave's *Golden Treasury of Songs and Lyrics*, Book IV, this was quite an appropriate theme for preparatory lecturing. I understood that the manner and matter of my lectures had impressed my class and as first impressions about a teacher's efficient handling of his subject and his general expression always last, I had thenceforth an easy time of it in my old college. Amongst the bright ones I had the privilege of teaching in my early years of lecturing at the Presidency College were—Kshitischandra Sen (K. C. Sen, I.C.S.) who was the best student of the English class and who distinguished himself by his English exercises at Oxford also and who now adorns the High Court Bench at Bombay as a Judge : I met him on two occasions at Bombay during my advanced years, when I visited Bombay as a member of the Education Sub-Committee of the National Planning Committee and he was so respectful and so loving !—Rameschandra Majumdar was another, who has recently retired from the Vice-Chancellorship of the University of Dacca and who, though not very bright

at the outset, improved steadily and made his name as a conscientious researcher in History even while very young and is now known all over the country as a very able historical scholar with special knowledge of, and researches into, Ancient Indian History. He is now compiling a comprehensive History of India in collaboration with Sir Jadunath Sarkar and a few other eminent historians—a venture which is sponsored by nationalist agencies and of the Committee of which, my old friend Dr. Rajendra Prasad of the Indian National Congress is Chairman. Another was Dr. Subodh Mukherji, who after a rather short but brilliant record as Calcutta University Post-Graduate lecturer joined the Finance Department of the Government of India, rose to be Asst. Accountant General—but resigned, as this mechanical work did not suit him, in spite of high emoluments—and is now Head of the Oriental Research Section at the Benares Hindu University. A very shy but promising pupil of these days was S. K. Halder, who was the youngest boy of the B.A. stage as I was the youngest Professor, and who has risen in the I.C.S. as Divisional Commissioner and Member of the Board of Revenue and is due to retire shortly. He was the son of Dr. Hiralal Halder, the celebrated Hegelian scholar and Philosophy Professor. Another was S. C. Sen who died prematurely after rising to be Accountant General, Bengal. Dr. Sushilkumar De and Dr. Sureschandra Gupta were two others—of whom Gupta after rising to be Inspector of Schools in the Assam Education Service died and Dr. De is a Professor of Oriental Languages and the Head of the Sanskrit and Bengali Departments at the University of Dacca and has earned deserved renown as a finished scholar and researcher. But I have forgotten to mention the most scholarly of these old pupils—one year their senior, who read with me only for a very short spell in the Presidency College—Dr. Radhakamal Mookerjee, now Head of the Economics Department at Lucknow University, one who has earned not only an all-India but international reputation by virtue of his original, painstaking and pioneer work in many branches of Economics, Indian Economics, Sociology and Ecology and who is always consulted by the Provincial Government of U.P. and the Government of India on economic questions. Him I met last year when visiting Lucknow and it was a great pleasure to sit with him in his Library adorned with artistic things in canvas and stone and clay when he showed me almost all his publications (one of them was on 'Mysticism'—and not a shallow book either—that shows his versatility and the deep and wide range of his intellectual interests). He was then working on the problem of redistribution of populations in the Pacific area and presented me with a small brochure summarising his

figures and data and suggestions. He was also one of those who came under the magic spell of the savant-sage Satischandra Mukherji of the Dawn Society as a young College lad and has more than justified the promise of his younger days. I found him a scholar 'to the finger-tips'—a rare specimen in our benighted slave-country where mammon-worship and the craze for fashionable houses and motor cars and an appreciable cash-balance have seized even college and University teachers: I mention a few who are in touch with me even to this day—there must be some others who have distinguished themselves in the Bar and the Bench or been absorbed into Government services and practically lost in their welter of files and dockets and pigeon holes: On the teaching staff were Professor Perceval, Prof. M. Ghosh, Professor W. C. Wordsworth (now on the Editorial staff of the *Statesman*—he resigned the Indian Education Service after rising to be Principal of the Presidency College and officiating as Director of Public Instruction); Professor Cunningham who later on became Director of Public Instruction in Assam (both Mr. Wordsworth and Mr. Cunningham joined when I joined) and Professor Praphullachandra Ghosh, two years my senior at College, a devoted scholar who had just secured the Prem Chand Roy Chand Scholarship and come back to education after a year only in the Executive Service as Deputy Magistrate and who and I became great friends at once, a friendship that has lasted to the end of our careers (alas: he earned a great name for himself as a very able and scholarly teacher, who had only two interests in life—Literature and Music, retired with honours amidst the regrets of hundreds of his later-day pupils, had his marble statue erected at the Presidency College by his old and new pupils but could not enjoy anything of these late honours as his brain has gone under and he has to be kept under constant vigilance!)—son also of a famous educationist, Ishanchandra Ghosh, for many long years Headmaster of the Hare School and well known for his Bengali translation of the Buddhist Jatakas, who lived to the good old age of 80, with his intellect quite vigorous and alert, dying in harness.

The strange irony about my government appointment was that it was fated that I would be 'protected' as a servant of the usurping Government for 14 long years by Divine grace till in the fulness of time I was to be launched again on the high seas of political strife and struggle, after my year's apprenticeship in 1905-1906. The Professor who took to me most was—Sir P. C. Ray—then simple P. C. Ray;—he was in the Department of Chemistry but his interests in Literature were deep and abiding and though in those days, most of the Science teachers kept to their laboratories and retiring-rooms on the ground floor and

hardly came up to join us in the sitting-room (meant for all) on the first floor, P. C. Ray was a constant visitor. Sir J. C. Bose was a very occasional visitor and the European Professors infected with the anti-Indian virus like Professor Jackson never came upstairs at all. Professor Benoyendranath Sen was at his post and as he was Editor of the newly started Presidency College Magazine under official auspices (the Magazine we started in 1904 was a private affair, recognised but not financed by the College), we came into intimate touch—for at his request, I contributed two or three articles—one, I believe,was on 'John Ruskin.' There was also the scholarly, modest and unassuming Satischandra Vidyabhusan of the Sanskrit Department who was amongst the very first amongst Bengali scholars to steer on the paths of research into Tibetan and Pali scripts and sources—he often requisitioned my help in rewriting and revising the English of his articles meant for research journals—well, the learned orientalist's handling of the English language was very unsure and I had to cut through his composition mercilessly and rewrite sentence after sentence. He was always exceedingly grateful for my unselfish labours and was very friendly. Such a model of modesty I have rarely met amongst Indian scholars. He died young and his death was a loss to the learned world.

There was another friend, Hemchandra Dasgupta, Demonstrator-Lecturer at the Geology Section. He was a neighbour like Pandit Vidyabhusan—my first rented lodgings were in Brojonath Dutt Lane and then in Arpuli Lane, very near the portion of College Street abutting on the Calcutta Medical College—and Professor Dasgupta was a constant chum, inviting us to his place and being invited in return. He was in touch with Prithwis Ray, a disciple of Surendranath and for long years his co-adjutor on the *Bengalee,* who was running a monthly English Magazine of repute—*The Indian World* and got me to write for it. I remember having written several reviews of books for this journal anonymously—it was a nationalist organ and it would have been risky to have appended my name to my contributions.

Then there were Professors D. N. Mallik and Sarada Prasanna Das (of Mathematics), Chandrabhusan Bhaduri of Chemistry, Charuchandra Bhattacharyya (he was an assistant of J. C. Bose) and the Professors of Sanskrit and Arabic and Persian and with most of them I was on very intimate terms. My social qualities ingrained in me by boyhood training helped me and I was a general favourite. After sometime Professor H. R. James came from Patna and joined as Principal—he who came later to grief, because he had asserted his prerogatives fully as Principal (like the Master of Balloil at Oxford and others of his ilk)

of the Presidency College during the 'Oaten Affair' in 1916, when the anti-Indian Professor Oaten in a moment of irritation had expressed his contempt of his 'coloured' Indian pupils in his lecture-class at the Presidency College and was assaulted and shoe-beaten by some of his 'irate' pupils, Subhas Bose, it was reported, truly or falsely I do not know was implicated—I was then Professor in the Rajshahi Government College in North Bengal—and when there was a Commission of Enquiry who sat in judgment on Principal James. Principal James came in for some censure and resigned in disgust and went away to England. He also taught English and had a few educational publications to his credit. He was a scholarly, upright man without any racial bias whatsoever and he took most kindly to me. He liked my straight forward ways and he had a good opinion of my abilities as a teacher. Once—only once, I believe,—the students of a class organised a little bit of a racketting during my lecture and I ran up to Principal James and he quieted the class at once by holding me up in very high terms before them and asking them not to take advantage of my extreme youth, telling them most sweetly that some of the leraners of today might be teachers and at the Presidency College in the course of 3 or 4 years after taking their M.A. brilliantly as I had done. As the appointment in the Presidency College which I held on an officiating basis was only for the period during which Professor J. N. Dasgupta would hold office as Principal at Hooghly, Principal James as soon as he became acting Director of Public Instruction, wrote to me from Darjeeling offering me a job on Rs. 200 (the Presidency College appointment was for Rs. 150 only) at the Sanskrit College for which a Professor of English had just been sanctioned by Government; and when I wrote back asking his advice as to eventual choice between his kind offer and the offer I had received from the Rajshahi College now under the newly constituted Government of Eastern Bengal on Rs. 200 but on a permanent basis in the Provincial Service Cadre—Principal James asked me not to worry about his offer but to take the surer one! Others in his position might not have been so helpful and fatherly.

I taught Tennyson and Milton and Ruskin's *Crown of Wild Olive* in the First Arts classes and Milton and Byron in the B.A.: but besides lecturing, I used to follow in the steps of my revered Professor H. M. Perceval and set the 3rd year boys to write exercises and essays on certain topics and as a result pupils and teachers were brought nearer together and I could make a mental note of the really bright ones. It is thus that I picked up the really promising and have followed their careers with love and interest, a sentiment which these pupils have

also appreciated. In fact the greatest solace of my life is not that I came in for a certain measure of celebrity as Congress worker and agitator fighting in the front rank during 1921-33 and as a journalist whose editorials were not mere ' journalese ' but had some literary and idealistic flavour (this was at least the opinion of many—not the least being Rabindranath Tagore, P. C. Ray and Satischandra Mukherji)—but that I have been cherised in the memory and confirmed in the love and regard of my pupils bright and mediocre, who fill and have filled all ranks of life in Bengal—from High Court Judges and Divisional Commissioners and other subordinate ranks to small and big officials even in the Police and the Intelligence Services, members of the Bar and the teaching profession, Doctors and Engineers—not to speak of those select spirits who have braved all risks in the service of Mother India and suffered transportation and imprisonment most gladly for the cause.

The officiating job at the Presidency College terminated in June 1909, when, shortly after, I joined as a full Professor at the Rajshai College.

But certain interesting events happened during my tenure of office at the Presidency College which should not be passed over. The trial of Aurobindo Ghosh, Barin Ghosh, Upen Banerji and others (known as the Maniktolla Bomb Case) began in the High Court in 1907-8 and what were my feelings when a notice asking me to serve on the Special Jury in this case was served on me ! Fortunately I was not empanelled and was absolved of a great mental tug-of-war—for I was the same confirmed sinner baptised in the water of nationalism as in 1905 and if the job in the Presidency College had been under Sir Bamfyde Fuller's Government in Eastern Bengal, I would never have got it—for there would have been a searching Police enquiry and my past activities would have been brought out and arrayed against my getting any appointment under Government (and quite right too) only Providence had in His mysterious dispensations played a humourous trick on the British administration and placed an anti-British rebel in a situation where as teacher of youth he would be of some service to the popular cause and of no usefulness (rather the reverse) to the foreign usurping clique. I had, I have forgotten to mention, been one of the recipients of Kali Prasanna Kavy-Visharad's medals struck for outstanding national service in the struggle of 1905-6 and this would have strengthened the case against me.

But there is such a thing as Destiny, and Destiny willed it and arranged it that I should be in the bigger colleges of Government in Bengal for 14 long years, doing my duties fearlessly, teaching thousands

of boys the lessons of self-respect and patriotic endeavour and giving the call for a 'dedicated' life openly through class lectures on Burke and Milton and Byron and Shelley and Ruskin—(those apostles of Freedom and Democracy)—and through encouragement of the study of English Literature and its classics and of ancient History and archaeology and also through social meets, physical culture clubs, nursing and fire-fighting associations and public lectures and addresses on the great savants and sages of India.

The *Bande-Mataram*, that English daily paper whose editorials were written by a panel of Editors of whom Aurobindo Ghosh, Sailen Ghosh (he was in the I.C.S., 'Home' service and had resigned his job in England and came over and joined the national struggle), Syamsundar Chakravarti and Hemendraprasad Ghose formed the core—and were always bright and full of patriotic fervour—used to be on our table in the Professors' sitting room in the Presidency College—I believe myself and Praphullachandra Ghosh were the subscribers—and we ostentatiously and openly read the virulently anti-British paper in the British Lion's own den—the Presidency College meant for training up loyalist administrators and servants of British Imperialism—in sight of the English colleagues. In later days, conduct like this would not be tolerated and there would have been very few to take the risk of being openly branded as sympathisers with the National Cause.

I spent a little over two years at the Presidency College and it was one of the pleasant portions of my life—for the Englishman's arrogance at least in the cultured departments like Education was not yet so pronounced and the 1905 movement had over-awed many an Englishman and Scotchman coming over to our slave-country.

The new acquaintances I formed, when at the Presidency College, were Principal Ramendra Sundar Trivedi (Ripon College—one of the most scholarly and patriotic and unassuming men I have ever known), Principal N. N. Ghosh, of the Metropolitan Institution (now the Vidyasagar College), Pandit Sivanath Sastri; my intimacy with Sj. Satis Mukherji continued—also I came to know Sir Asutosh Mookerjee and his great charm and personality.

These two years left their impress on me even afterwards. As a young man, I had mixed intimately in Calcutta society—I had worked alongside of men like Perceval, James, J. C. Bose, P. C. Ray, M. Ghosh—I had taken the measure of contemporaneous young Professors from Oxford or Cambridge or London—I had not deviated by a hair's breadth from my views and opinions on men and movements and the result was that when I joined the Rajshahi College in 1909, I became virtual leader

and idol of the students, their mentor and their guide, I infused the College with ideas of self-respect and national worth and national service, became a link between the town and the gown, helped other colleagues in standing on their dignity before better-paid but certainly less cultured Government Executive and Judicial officers (including I.C.S. men). But of all this later.

*Presidency College in* 1917

After seven and a half year at the Rajshahi Government College, I was transferred back to the Presidency College in January, 1917.

Well, the Presidency College had visibly changed mean while—young Mr. Wordsworth, my contemporary and colleague of 1907 was now Principal and one Mr. Sterling, an Englishman of hardly any real scholarship who might have been a success as a recruiting-sergeant or Police or Executive Officer—but in my view, was quite unfit for a serious educational job was Head of the English Department. Some of my old colleagues were there and some of my old Professors also—Professor M. Ghosh, Professor Saradaprasanna Das, Professor D. N. Mullik, Professor J. N. Dasgupta—P. C. Ray also. My old chum Praphullachandra Ghosh was there and that was a great encouragement. Meanwhile some young people had joined whom I found to be pedants on the one hand, rather ' over-conscious ' and at the same time very servile to their English seniors. These things I could hardly stomach —and my first reception by the new Principal rather chilled me. He made a pretence of not recognising me at all as his old colleague (we had taught the same book of Ruskin's in different sections of the College 10 years ago) and when I reminded him of our old association, it appeared he did not relish it much. The man had been hoisted over the heads of the ' native ' senior Professors, many of them very able and with European degrees—and his crown evidently did not sit lightly on his head. The Head of my Department—Professor Sterling—I found most interfering—it was a question of incompatibility at first sight—I did not like his free-and-easy ways of hectoring and advising me on details of my work in tutorials and other things, as if I was a greenhorn and I had to tell him I was an ' old boy ' of the College and had been Professor there ten years ago, knew all its ins and outs—and Mr. Sterling did not like my independence and jauntiness. The fact is, 8 years of Rajshahi, where we had built up a really national College with Freedom as the be-all and end-all of all College pursuits and studies, where inside the College there was not a single white fly—had bred in me a temper totally unsuited to the compromising spirit, the bland acceptance of

inferior status of the majority of Indian Professors. I went to my lectures, caring nothing about the English Head or the English Principal —it was my old College and it was my own preserve—my ' alma mater ' where I had learnt many a lesson and fought many a fight and where I carried myself so independently even 8 years back—and I took the boys into my confidence and was immediately and widely popular. I occasionally taught Rabindranath in the classes—in Bengali—(he was not part of the English text anywhere yet) and asked the sprinkling of Parsee and Anglo-Indian boys to hear with me (they could not follow a single syllable either of Rabindranath's Bengali poetry or my reading or elucidation)—the world war was on and I set my boys to write essays as to the propriety or otherwise of helping the British in this war by joining as combatants or the racial bar in India, or the poverty-problem or the defects of the University system. On one occasion, I had the original experience of being asked ' to run up to my class ' by the office steward, supposed to be the Principal's Head Assistant and adviser ; —of course, I did not take it lying down—and practically ' made a scene ' in the Professor's Common room when I came back from the lecture and told everybody I was going to the Principal *at once* and meant to ask him if his steward (a mere office assistant) had been made ' overseer ' of college Professors. It transpired that some of the Professors had been found to be habitual ' slackers ' and to remedy this, big clocks had been set up over the first and second floor landings and it was made a rule that the interval between finishing one lecture and starting another should not exceed 7 minutes : many still were ' slack ' and the steward was in the habit of giving them friendly hints as to the time and I was asked not to take the matter so seriously. Well, I stuck to my guns—for here was involved a big principle of prestige of the entire body of teachers—and at last some of the senior men assured me they would approach the Principal next day and appraise him of the situation. They expected little but I knew strong and just action must bear results and young Principal Wordsworth had to come to us in the Professors' room and apologise for the unseemly conduct of his steward.

I was on the point of being taken in as a Post-Graduate Lecturer by Sir Asutosh in addition to my duties, when the conspiracy hatched between the white Principal and the white Head of the English section came to a head—my friend Professor Rabindra N. Ghosh had thrown up his appointment as Senior Professor of English in the Government College at Krishnagar, where he had been transferred, more or less as a penal measure, after the unseemly ' Oaten ' affair in 1916—and

Principal Gilchrist of Krishnagar wanted a man of my ability and academic honours to replace him and so my transfer had been arranged between the Educational Director and the Principal and I was to have a second move only after 7 months! Well, I met Professor Sterling and gave him a bit of my mind, straight from the shoulder and he seemed to wince: I made him go to the Principal to intercede and prevent my transfer (I knew it was their joint doing—but I made him go, that was something) and he came back to say the orders were final. Evidently he had reported the strong words I had uttered and they were confirmed in their resolve to shove me off. Was I not disturbing the sweet "placidity" of the college waters, would not the College return to 'normalcy' after I left?

The only silver lining to the clouds and mists of my 7 months' tenure of office in my old College was my association with my old Professor M. Ghosh and chum Prafulla Ghosh and with Professor P. C. Ray, who was uniformly loving and kind—Professor Monomohan Ghosh told me in confidence that nothing could be done to these white bunglers for the present and advised me to let superfluous steam in my mental make-up off by *'writing it out'* (his own expression which I still recollect after a lapse of about 30 years). Prafulla Ghosh was very cordial and sympathetic but what could he do?

With P. C. Ray I had many exchange of confidence and we discussed Literature and English poetry often when together we were 'invigilating' in class or University examinations in the College. The learned Professor, the idol and exemplar of teachers and students for a generation, retired in 1917 and it was my privilege to be approached by the new and old Science boys (of the M.A. and M.Sc. classes) for writing, in their behalf, the valedictory address. I have been told that the address, brief and recy, punctuated with high and deserved praise of the savant was widely appreciated by the audience, by the Science men and students assembled and by Sir P. C. Ray himself. The thing is, I had written it straight out of my heart and my 'hero-worship,' never bordering on servility or loss of my individual point of view, expressed itself directly—for I had been a lover and admirer of P. C. Ray ever since I met him in the flesh in 1902!

I had visited Sir Asutosh Mookerjee occasionally and I told him one evening of the sudden transfer to Krishnagar which was due to the machinations of the 'English clique' and I remember how for over one hour he gave me solace and comfort and asked me to rely on Providence for "what seems to be an evil today turns out to be a blessing tomorrow." Words very truly said by one of the greatest men of Bengal

—which have certainly come true—for if I had not been kicked about from place to place by these white men, if I had not been a victim of their racial arrogance and of unjust treatment, I might not have come out, as I did in 1921, for the country's service—a bigger and a much more comprehensive cause than serving as a Presidency College Professor in these later degenerate days and retiring on a pension with the doubtful accretion of a motor-car and a bank-balance.

I had made the acquaintance of C. R. Das also about this time. It was in 1917 that he had delivered a fine address in Bengali at the Provincial Political Conference held in Bhowanipore in which for the first time, I found a new approach to Bengal's problems and a new orientation of political method. Chittaranjan Das hailed from Vikrampur and that was an additional, reason of my attraction for him. I visited him once in his Bhowanipore home (now the Chittaranjan Seva-Sadan, for this prince of sacrificers left nothing for his family except, I have been told, a bare pittance for his saintly spouse Sjta. Basanti Devi). I had just half-an-hour's conversation with him and we discussed among other things the feasibility of a College at Vikrampur. The area had as many as forty High Schools, from which over 500 boys passed out every year and with these feeder schools, there would be no dearth of students. A College had been started several years before by one of the Roys of Bhagyakul in the subdivisional town but the College owing to mismanagement and lack of support from the officials and Bar of the Munshiganj subdivisional town did not prosper and had to be closed down. I found Chittaranjan not very enthusiastic : evidently his thoughts were already turning to problems of the masses, their education, their lack of any economic and political consciousness, the apathy of the townspeople and English-educated classes towards them and urgent village problems and he did not think much of these colleges under the official, outmoded system, which really had been responsible for creating a wide gulf between the classes and the masses, with tragic results. I had also made a trip to Santi-Niketan earlier about 1912 and met there several of my old acquaintances, amongst them, the late lamented Ajit Chakravarti, who fell under Rabindranath's spell after entering College, left his studies at the B.A. stage without taking a degree and joined Santi-Niketan, which was then a smallish place with, I believe, not more than a dozen workers and teachers, one of the most enthusiastic being Santoshkumar Majumdar, one of the nicest men that I ever met and one of Tagore's early pupils and first workers : he also, alas ! died young, much to the loss of Santi-Niketan and the cause it has always stood for. I was then Professor at Rajshahi College

and though I found real welcome from most of Rabindranath's co-workers, I came across just a few who thought me, a government College teacher rather out of the pale and were a bit stand-offish. Rabindra Nath was there, I saw him taking his morning walk in the open grounds but I was too shy to encroach upon his leisure. I believe I met also Kshitimohan Sen, another Vikrampur man, who had had a fine Sanskritic training at Benares and had joined the educational experiment and also Pandit Vidhusekhara Sastri. I talked with the boys and found them, some at least, very alert but a little bit too 'cock-sure.' I am not quite sure if C. F. Andrews was there yet. I found that the young boys had rather a bit of excessive freedom and went about mostly according to their boyish impulses and inclinations—a few climbing the trees and dangling their legs, when the teacher was giving lessons under the shade. This rather jarred on me. I still believe Santi-Niketan was rather slack in these matters and the result has not always been satisfying—for if the truth must be told, while the teachers of various departments at Santi-Niketan have led very useful lives and made their mark in research in art, in music, in the cultivation of Bengali language and Literature and in Oriental Scholarship, the output of boys of outstanding ability has not been so marked; and today, the Arts and Crafts section is the most successful wing, under the inspiring lead of Nandalal Bose, the most unassuming artist that I have ever met anywhere, thoroughly devoted to his art and his teaching of art, absolutely impervious to other wordly considerations, with a smile always hovering on his lips. In 1917, I remember to have visited the poet at his Jorasanko residence and to have on certain occasions joined the groups listening to his written discourses. Before this, I had met Sudhindranath Tagore at Giridhi and struck up an intimacy with him—a soul-intimacy for we agreed on many fundamental issues of life and him also I occasionally met—he was the pink of courtesy and a most unassuming gentleman: his son Soumyendranath was then a mere stripling; also I had met Dinendranath Tagore, the musician. Also I had studied the works of *Neitzsche* and been carried away by his vigour of mind and daring: I had also some contacts with the Bangiya Sahitya Parishad and its learned members. The refreshing lectures delivered by Professor Patric Geddes on certain aspects of civilisation and its development had also made a deep impression on me—and I met also Brojendranath Seal but had not the opportunity of making any intimate acquaintance with the savant. I remember to have been complimented by him on the only occasion I went up to see him and talked for an hour with him, on the possession of 'a breezy mind' which he opined might be useful to the Post-Graduate

Department if I was taken in there. The most intimte friend with whom I was on close and reciprocal visiting terms was Keronkumar Sengupta, the Geologist, who after taking high degrees and diplomas in English Universities, had taken and quickly chucked off a high-salaried appointment in a European firm and set up his own independent business as a " Geological Adviser and Prospector," often requisitioned by Native States. He was the nicest of friends, versatile, full of " fun and pep," genorous to a fault and his wife who died very soon after was a lady of finest type. It was a pleasure to visit the couple : they had two children, a boy and a girl and almost every Sunday we passed in each other's company.

However, my Calcutta life which was just beginning to spread itself amongst cultured and patriotic circles—suddenly was interrupted—by my transfer to Krishnagar. My father had just retired from his service and joined me with my mother at Calcutta and the whole family was shifted to my new place.

# THE RUPEE RATIO

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EVER since the exchange debacle after World War I, economists in India have quite justifiably shuddered at the prospect of a high exchange rate for the rupee. The bitter experiences of the exchange policy of those days—the untold loss sustained by the country as a result of it—have created among the majority of our economists a strong feeling against any kind of exchange appreciation and almost an obsession for devaluation.

The circumstances under which the second World War has ended are, however, entirely different. A number of factors have appeared on the scene of Indian post-war economy this time which did not follow in the wake of the War of 1914-18. It is in the context of these altered circumstances that the question of fixing the external value of the rupee has to be carefully studied. A simple reference to the disparity between the internal and external value of the rupee would not be sufficient to make out a case for devaluation.

The limitations of the purchasing power parity approach, using price movements as the chief criterion for ascertaining the equilibrium rate of exchange, are well-known. A simple comparison of price movements in different countries would not by itself be enough to determine the equilibrium rate. We have, no doubt, to take into account the price, wages and cost structures in India in relation to such structures in the outside world. But that would not be sufficient. We would have to take into consideration India's balance of payments position as well. As a recent publication of the League of Nations ("International Currency Experience," p. 126) has pointed out, the primary criterion is the balance of payments equilibrium. But there are also other subsidiary criteria, for instance, a high level of employment at home. We should also remember that the rate should be one which could be maintained by our Central Bank without undue strain as well as altered without much difficulty.

The whole background of the ratio question has been revolutionized to-day by the emergence of the problem of repayment of India's sterling balances. It is in the context of this vital problem that an approach should be made to the task of deciding the initial par value of the rupee as required by the Articles of the I.M.F. (Art. IV, Sec. 5 and Art. XX,

Sec. 4). The most important question is : Do we or do we not desire a reasonably speedy repayment of the balances ? If the answer is in the affirmative, we must adopt an appropriate exchange policy which would facilitate that repayment. As a creditor, we must realise that it would be suicidal to impose an unnecessarily heavy burden on the debtor which might even compel him to default. When we are pleading for easing the burden of repayment for Great Britain, we are not doing so out of generous motives. We are trying to lighten her burden for our own selfish ends. To facilitate the repayment of her debts to us without unduly burdening her, it is imperative that conditions should be created which would be favourable for an export surplus for Great Britain and an import surplus for India.

1. The problem of repayment of sterling balances has projected a new situation in Indian post-war economy in the following manner. Suppose the rupee is overvalued at 1/6d. and the equilibrium rate is 1/3d. The balance of payments being in equilibrium, a new factor is now introduced in the shape of the repayment of the sterling balances. This huge transfer problem will at once upset the balance of payments equilibrium. Great Britain's efforts to increase her exports to India to repay these balances will turn the terms of trade against her. The strain of this adverse turn in the terms of trade may be somewhat relieved by a planned import policy on our part but it cannot be entirely eliminated. The result will be a disequilibrium in the international position of Britain and India. There will be an upward pressure on the rupee which will tend to appreciate in terms of sterling. In the face of this upward pressure, any effort to peg the exchange rate at the old equilibrium level of 1/3d. would tend to undervalue the rupee. Conditions would be created which would be favourable, not for an import surplus, but for an export surplus, just the reverse of what we were endeavouring to achieve. If the terms of trade improve by 20%, the appropriate ratio should be 1/6d. We should be very careful not to be hustled into a policy of under-valuation of the rupee for that would spell disaster. All our hopes of obtaining a repayment of our balances in the foreseeable future would be blasted. If there is any misgiving as to what, should be the correct ratio, it would be advisable to err on the side of a slightly higher as against a lower ratio.

2. The present post-war situation differs from that after the first World War in another significant aspect. The end of World War II has not been followed by a depression in any sense in which the first World War was. We should not be obsessed by fears of deflation. Such fears to-day are largely illusory. There is hardly any likelihood

of a decline in prices in the near future. Even if there is any decline, it will not be precipitate but only gradual and slow. In this background, devaluation is very likely to give a further impetus to the already existing inflationary forces.

3. The cure for the decline in the internal purchasing power of the rupee and the rise in prices is definitely not devaluation. The present state of affairs has been brought about by the inflationary process generated in war-time. I believe that the rise in prices that took place during the war was not accompanied by an equitable redistribution of income. In most cases income and costs were not readjusted. In the circumstances devaluation will aggrevate the miseries of the countless millions who have already suffered a great deal. It will make the rich richer and the poor still poorer.

4. It is debatable how far devaluation will be of any real benefit to the Indian farmer in the present situation. In a country like India which is normally self-sufficient in the matter of agricultural production, agricultural prices are not likely to be influenced by import prices to the same extent as prices of manufactured goods. There is every probability that after devaluation the inter-relationship between agricultural and industrial prices may be disturbed in a manner prejudicial to the interests of the Indian farmer. Further, the scope for exports of agricultural goods from India appears to be limited because of (1) the prevailing shortage of food and the increasing population, (2) her expanding economy which will absorb by far the greater portion of the raw materials dependent on external markets to-day and (3) the contemplated international commodity agreements. We have already decided to restrict export of raw cotton, cotton manufactures, oiled seeds, etc. to severely limited quantities for the sake of domestic needs. The question, therefore, of safeguarding competition by devaluation will probably not arise at all.

5. In arguing the case for some measure of devaluation a great deal of emphasis has been placed upon the disparity between the purchasing power of the rupee, and that of the pound and the dollar. This disparity has been considerably narrowed down by the upward movements of price levels in both Great Britain and the U.S.A. in recent months. With the relaxation of economic controls in the post-war years, prices are likely to rise still further in England. With the abandonment of price control in the U.S.A. prices are rocketting there in such a manner that the American dollar which has hitherto been the hardest currency has grown suspect. Two countries, Canada and Sweden, have already taken defensive action by appreciating their

currencies by 10 and 14% respectively. Of course I am not suggesting for a moment that the Indian rupee should be similarly appreciated.

6. Apart from the question of the repayment of the sterling balances, the needs of our development economy in the post-war period should be the guiding factor in the matter of fixing the exchange rate of the Indian rupee. We are in urgent need of capital equipment. The cost of imported capital goods can in no circumstances be allowed to rise so as to affect our reconstruction programmes. Industry has to be assisted, it should be done directly by tariffs and not indirectly through the backdoor of devaluation.

A careful consideration of all the above factors has led me to conclude that the best course for us would be neither to raise the ratio beyond 1/6d. nor depress it below 1/4d. The maintenance of the existing exchange ratio would enable us to avoid the pitfall of undervaluation into which a policy of devaluation may easily land us. At the same time, the ratio of 1/6d. would absorb a great deal of the shock that might result from a large-scale transfer of the sterling balances.

In advocating the maintenance of the status quo in the matter of the ratio, we are certainly not subscribing to the policy of maintaining the status quo in respect of the price level. Though we would emphatically repudiate the idea of a return to the 1939 level of prices, we would not favour the continuance of the present artificially high level. We believe that one of the most important objectives of our post-war controlled economy would be to bring about a readjustment of agricultural and industrial prices. Both the agricultural and industrial prices should be scaled down by a judicious internal price policy, the former being maintained at a slightly higher level than the latter. Thus a new price relationship should be fostered in which the height of the agricultural prices will be about 150% of the pre-war level while that of the industrial prices would be 75%. The farmer will suffer from no inequity calling for a remedy through devaluation. The prevailing sharp disparity between the internal and external value of the rupee would be considerably narrowed not only by the upward movement of British and American price levels but also by the forcing down of Indian prices to a new height in the post-war period.

It is hardly necessary to point out in this connection that we always reserve the right of proposing a change in the ratio to correct a fundamental disequilibrium whenever it occurs in accordance with Art. IV, Sec. 5 of the I.M.F.

# AGRICULTURAL INSURANCE UNDER PLANNED ECONOMY IN BENGAL

(II)

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Private Insurance.—Private agricultural insurance should be organized only as mutual and co-operative institutions, and joint-stock or mixed companies should not be allowed to grow at all. The difference between the mutual insurance societies and the co-opertaive insurance institutions will be in the fact that in the genuine mutual insurance societies the control would vest in the hands of the insured members themselves who would also be the policy-holders of the societies, while in the co-operative insurance institutions the control would lie in the co-operative organizations or the co-operatively organized members, and these organizations or members, as the case may be, would subscribe the shares or guarantee the capital of the society and make use of the insurance services of that society. The aims of both the systems, however, would be more or less similar. They should insure only against the specific risks enumerated before. Again, self-help would be the underlying principle of both the types, although there would obviously be some differences in the organizations of the two.

(*a*) Mutual Insurance Societies.—The agricultural mutual insurance societies should be organized on the following principles :—

(*i*) Absence of Share-Capital.—There should be no share-holders and no share-capital. The capital should be owned by the policy holders and managed by a board of directors electedby them.

(*ii*) Absence of Dividend.—No profit or dividend should be declared. The income should be utilised to meet the costs and pay benefits. The surplus, if any, should be returned proportionately to the policy-holders as bonuses, or may be utilized in reducing premiums. This latter practice has been adopted by the " Caisse Centrale Incendie " (The Central Office for Fire Insurance) in France.

(*iii*) Predominance of Personal Element.—The insured persons themselves would manage these insurance societies and, as it is they who would bear the losses and reap the benefits of success, they would naturally maintain a great personal contact.

(*iv*) Absence of permanency.—Such societies would not enjoy the lease of life enjoyed by the corporations, but would only be unions of persons brought into being by a contract of mutual service.

(*v*) Non-participation in Speculative Activities.—The mutual societies must keep themselves off from all sorts of speculative activities.

The agricultural mutual insurance societies can be started by the agriculturists themselves in the rural areas as they have been organized and working for a long time in the United States, Germany, France, Italy and Spain. The rural or local societies should, at least in the earlier stages, be allowed, as in France under the Act of 1923, to insure against one kind of risk only. The membership should remain open to all the farmers and owners of agricultural land in an area which would be limited for every local society. There should be no share and no dividend. The management should be honorary but a paid secretary and a treasurer may be appointed. The reserve funds of the societies may be deposited with the treasury, the Reserve Bank or other banks dealing with agricultural credit. They may also be invested in Government securities, Treasury bonds or other securities issued or guaranteed by the State, or in the shares of the agricultural co-operative credit societies. The Reserve Bank and an Agricultural Bank that should be set up to deal with long-term agricultural credit, should also accommodate the insurance societies as far as possible. The Provincial Government should, whenever necessary, be prepared to render financial and other assistance to these societies which in return would agree to remain under the general guidance and supervision of the Provincial Insurance Department.

The local mutual insurance societies may combine themselves into regional re-insurance societies. Regional re-insurance societies may be formed in each district combining all the local societies within its jurisdiction. The regional societies may again be federated in the central re-insurance societies. This society would stand as the apex institution in the Province over all the agricultural mutual insurance societies. The central society would re-insure the regional or district societies which in their turn would re-insure the local societies. The district society and the Central or Provincial Society would be multi-purpose societies, that is, each district society would re-insure all the local Societies within the district, that is, would deal with all the different risks incidental to agriculture. The Provincial Society also, as it would re-insure the district societies would deal, with all kinds of risks. It

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may be noted here that the Central Re-insurance Societies functioning as general societies for the re-insurance of different types of agricultural risks exist in various countries including the Baltic countries of Estonia, Latvia, Lithuania, and Bulgaria, Italy and Belgium. Special societies, however, for the re-insurance of one type of risks only opreate in Belgium, Denmark, Finland, Holland and Hungary. Moreover, the State-supported system of mutual insurance in Algeria, France, Holland, Morocco, Spain, Tunis, Switzerland also works as special type of re-insurance societies.[9]

The Provincial Mutual Re-insurance Society should act in co-operation and collaboration with the Provincial Co-operative Insurance Society proposed hereafter and also with the Provincial Department of Insurance. Through the network of insurance organizations, as described above, the agricultural risks will be spread over a large area —the entire Province and will not remain localized in a particular place, thereby reducing considerably the severity of their effects on the affected area or areas only. The principal function of the district re-insurance societies would be to grant relief to and to share in the losses of the local societies under it, for which the local societies would, of course, be required to pay premiums to the district re-insurance societies. Similarly, the district societies should re-insure with and pay premiums to the Provincial Re-insurance Society which would in its turn grant relief to and share in the losses incurred by the district or regional re-insurance societies affiliated under it. On the other hand, in case of any surplus fund remaining with the Provincial Re-insurance Society—surplus after making provisions for all contingencies—, it can be paid back to the district societies, and the latter, again, can pay, out of the refunded premiums, substantial sums to the local societies. This would ultimately enable the local societies to reduce their premiums charged from the policy-holders.

(*b*) Co-operative Insurance Societies—So far as the agricultural co-operative insurance societies are concerned, these should, unlike the mutual societies, be established as business enterprises and will enjoy the permanency and continuity of corporate bodies. But their primary motive, like the mutual insurance societies, and unlike the capitalistic institutions, should be self-help and service and not profit-making. Besides, co-operative societies would declare dividend but that will be strictly limited in amount. Membership in these societies would be entirely voluntary. The societies should be initiated and operated

[9] Barou, 'Co-operative Insurance' (King & Son), 1936, p. 342.

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by the members themselves and would be managed by them collectively on a democratic basis.

As we have proposed in the case of the mutual societies, the local or rural co-operative insurance societies should be organized in the initial stages on special lines, that is, there will be one society each for dealing with insurance against one kind of risk only. There should be a separate society, for example, dealing with fire insurance alone, another with hail and windstorm together, a third with livestock, and so on. As the funds of the local institutions are not likely to be of very large amount it would not be proper for one institution to take the responsibility of ensuring protection against the various risks of agriculture. The regional or District Agricultural Co-operative Re-insurance Societies will act as agricultural general co-operative insurance societies. The district societies, it can reasonably be expected, standing at the head of all types of rural co-operative insurance societies, will have ample funds so that the granting of protection by them against one kind of risk would not ordinarily affect very much their capacity to grant similar protection against other risks. Moreover, they will enjoy the facilities of re-insuring the policies insured by them with the Provincial Agricultural Co-operative Insurance Society which would always come to the assistance of the district societies. A very important reason in favour of a district insurance society being a general purpose society is that, being situated at the top of all and every type of co-operative insurance societies, it would enable to act like a General having a considerable strategic reserve in his hand which he can throw at the point where it is needed most. Possessed with a considerable sum made of the payments of re-insurance policies by the local societies, on the one hand, and fortified by its own re-insurance with the Provincial Society, on the other, a district society would be in a position to extend its hand of protection against every kind of insurable risk incidental to agricultural, happening within the district and affecting the members of the local insurance societies. But, for a local society, if it is a general-purpose one, a great devastation by fire may be, to take an instance, too exacting to enable it to grant relief for another risk, say, cattle epidemic or destruction by hail or windstorm, that may occur the same or the next season. A district society, too, may be faced with such contingencies, but it would be in a far better position to tide the latter over. For administrative convenience, however, the Provincial and the District Societies may have separated departments, each dealing with a particular kind of risk.

But though the rural insurance societies are proposed to deal with

one kind of risk only, it is meant only for the earlier stages of the Plan. As it is our considered opinion that co-operative organization should grow on local rather than on commodity basis, all the special local insurance societies should ultimately come together and form a general-purpose society. In the latter case, however, each such society will have a separate department for dealing with one kind of risk only and each department will insure a property only against the risk of that particular kind and fix separate premium for it.

Policies and Premiums—The policies of both the mutual and the co-operative societies should be issued firstly in those cases which are not covered by State or public insurance, and after that to cases partially covered by the latter, as supplementary insurance. The premium rates should be generally small and should vary with the nature of the risk to be covered. The profits may, after a sufficient reserve has been accumulated and maintained, be utilized in the reduction of premiums. In case of life insurance they may go to increase the amount subscribed under the policy. With regard to the payment of compensation, it may be provided at the first instance that no compensation would be awarded unless the loss exceeds 5 per cent. of the insured value, and ordinarily the compensation rate should not exceed 80 per cent. of the damage, although the payment of cent. per cent. compensation should always be aimed at. Any loss arising out of deliberate and wilful negligence or default would not be compenasted. Whenever any claim to compensation will be made, the extent of damage should be properly surveyed and the reasons of damage found out. When the claim is proved to be genuine, compensation should be made not merely to cover the direct loss but also indirect losses as well. But such indirect losses must be consequential to the mishap that occurs and must have metarially affected the condition of the policy-holder.

Joint Co-operative Insurance and Credit Societies—Germany and Bulgaria have joint agricultural co-operative insurance and credit societies. The originator of these joint societies was no less a personality than Raiffeisen himself. The arguments put by him in favour of such joint societies may be summed up below. Firstly, the position of the borrowing members of the rural co-operative credit societies would be very much strengthened by insurance. This is the most important argument. Secondly, the existing local co-operative credit societies can easily be utilized for introducing insurance for even the poorest section of the agricultural population. This would save expenses for starting separate insurance societies. Thirdly, the reserve and other funds of the insurance societies could be utilized for purposes of financing long-term credit.

While the arguments in favour of joint insurance and credit societies are very cogent and weighty, still with regard to their establishment in this country, it should be noted that agricultural insurance, if it is seriously strived for, would be almost a new thing and, as such would have in the primary stages to pass through various processes of trial and error, and to negotiate many hazardous points. It will certainly take some time to stand strong. On the other hand, the rural co-operative credit organizations, even though they are working for a considerable time, are still mostly in tottering conditions. They have not only touched a very small percentage—only 6 per cent. in Bengal—of the total population, but even those that exist are financially very weak. A considerable effort and much time would be needed to make them stand on a strong and sound foundation. Under the circumstances, it would not be judicious to put the two together. That would be like placing two lame men in support of each other. One must at least be strong enough to support the other. Otherwise both may crumble down together. It may be pointed out that even in Germany the joint operation of the rural co-operative insurance and rural co-operative credit under one institution did not take place before 1922, even though Raiffeisen had been preaching the utility of joint societies since the latter part of the last century. By 1922, indeed, both co-operative credit and co-operative insurance, and more specially the former, must have attained in Germany a sufficient degree of strength to make their joint operation a success. So, in this country, too, joint insurance and credit societies can grow up only when both of them, and particularly credit societies, have gained a sufficient strength. There can however, be no doubt that when the co-operative insurance societies will have reached a fairly satisfactory progress, the surplus funds lying with them would be very profitably utilized for short periods in financing the rural co-operative credit institution, while long period investments may be made for developing various co-operative enterprises such as rural co-operative housing, rural co-operative industries, etc. But such investments of the surplus, surplus above a reasonable reserve, funds of the agricultural co-operative or mutual insurance societies should be made with the greatest caution, since any failure would have serious repercussions on the investing societies. At any rate, they must not divest more than only a part of their surplus funds.

Government Help.—The State or the Provincial Government, through the Provincial Department of Insurance, can render a lot of assistance to both the mutual and the co-operative insurance societies. Firstly, the articles of association and the rules for admission and with-

drawal of members, as in Italy, may be exempted from registration and stamp duties. The reserve funds may also be free from taxation. Secondly, as in Spain, the State can grant protection in the form of re-insurance through the State Insurance Department. Thirdly, as in the case of the French Mutual Insurance System, the State can award foundation grants to enable the agriculturists to meet the initial expenses of forming the societies as also to build up a preliminary reserve fund. Fourthly, the State may sanction grants to societies in full working order for any unusual loss they might have suffered. Fifthly, the State can help in the form of making available to the societies expert advices, guidance and supervision.

The Government will have to take a great interest in the subject of agricultural insurance and apart from their direct responsibility involved in insurance operated by them, they should be prepared to take a substantial share in the running of the private insurance also. Co-operative credit in India has largely grown under the State initiative. If this could happen at a time when " laissez faire " was the principal guiding policy of the Government in this country, surely the Government would have to take a large initiative and interest in co-operative insurance under a planned economy.

Dr. Barou has ably put forward the arguments in favour of State intervention in agricultural co-operative insurance and we cannot resist the temptation of quoting him ' in extenso.' Thus he writes :

" The co-operative movement all over the world has always been proved of being an independent movement free from State support and interference. Times, however, change. This traditional theory grew up in times of competitive capitalism. Now we are on the way to a new conception of the State which becomes an important factor in a new regulated economy. Such a State not only introduces legislation fostering economic developments, but must also support directly such branches of economic life as are neglected by private initiative. Many branches of rural insurance—especially hail, windstorm and livestock—do not represent tempting playgrounds for profit-making enterprise, and they are subscribed by capitalist societies at rates which are often nearly prohibitive for farmers. Co-operative Insurance Societies, starting these branches of insurance are exposed to two alternatives : either they have to follow the course taken by profit-making insurance companies and calculate their rates high, or they subscribe insurance at low rates but face the danger of being unable to fulfil their obligations 100 per cent. in case of greater losses than had been foreseen by them. State grants and subsidies fill this gap. If the State participates in building up part of the capital of the insurance institution, it makes

the latter stronger and creates the necessary reserve for emergencies; in other cases the State grants a regular subsidy and the society can regard it as a reserve for emergency, or as covering part of the cost of operations."

Hence, the State aid for co-operative agricultural insurance societies would serve a very useful purpose and should be strongly advocated. But this aid should be only supplementary to the resources contributed by the co-operatively organized members and serve only as an additional reserve for unforseen or incalculable emergencies.[10]

Conclusion—We have given above the bare outlines of a scheme for establishing agricultural insurance societies in this Province. The model, however, is equally applicable to any other province or State in India. The need of agricultural insurance in this country cannot too strongly be emphasized. Unfortunately, however, the subject has hitherto been almost absolutely neglected. Apart from the few provincial co-operative insurance societies[11] and a certain number of cattle insurance societies,[12] agricultural insurance remains almost unknown to the people of this country. Not only the State has failed to take the requisite initiative in introducing agricultural insurance, but the non-official public, too, has not evinced proper interest in it. The result has been that there is even no adequate literature on the matter. Even the Report of the Royal Commission on Agriculture, which is considered almost like an almanac on agriculture in India, contains nothing on the matter. So, an intensive study and comprehensive research on the possibilities of introducing agriucltural insurance in this country is an urgent necessity. If the planning authority undertakes or arranges for a co-ordinate study and research, it can be applied in practice on a country-wide scale to give relief to the agriculturists sooner than it can otherwise be possible. A special Committee or Commission should be appointed to enquire and report on its possibilities in India. Such Commission should visit Europe and America and observe the actual workings of the agricultural insurance societies in those countries. The Government and the Universities should also undertake to send selected candidates to those countries for studying agricultural insurance. As a matter of fact, the subject must be approached from both theoretical and practical aspects. What we have done in this chapter is only a brief enunciation of the principles that should underlie agricultural insurance and a short scheme of its possible workings under a planned economy.

[10] Ibid., p. 343.

[11] Ibid., p. 236.

[12] Hough, 'Co-operative Movement in India,' p. 188.

# WITTICISM IN ARABIC LITERATURE

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II

44. Al-Shabi passed by a tailor and said : O Tailor, I have an oblong earthen vessel which is broken, you please sew it : The Tailor then rejoined : Could you give me the threads of air, I would sew it for you :

45. Al-Rashid asked Abu Yusuf : Which is sweeter, Al-Faluzaj (sweet-meat made of starch, water and honey) or Al-Luzinaj (Almond-cake, a confection of almonds, a food of which almonds form a part) ? Abu-Yusuf replied : O the Commander of the faithful : I can't pronounce judgment on the two absentees : Al-Rashid ordered the two to be presented when Abu Yusuf went on eating one morsel from this and one morsel from that till he finished half of each of the two silver cups filled with them, and then said : O the Commander of the faithful : I have not seen two opponents as conflicting as these two, whenever I wanted to pass judgment in favour of any one of them, the other adduced arguments : *Ibid.*, p. 40.

46. A snake made an attack on Yazid b. Al-Muhallab and he did not defend himself against it. So his father said to him : You have lost wit since you have forborne to exercise courage (' A coward is a fool ; note the manner in which it is put ').

47. In the house of Al-Rashid there was a bundle of cane (Arb. Khaizuran means cane and it is the name of Al-Rashid's mother as well). Al-Rashid asked his vizir, Al-Fazl b. Al-Rabi : What is this ? Al-Fazl replied : It is the artery of spears, O the Commander of the faithful : (See how Al-Fazl avoids uttering the name of Al-Rashid's mother out of great respect and nice etiquette :)

48. A thief entered the house of a certain man and found therein nothing. So he noted down on the wall : Your want and my toil have been painful to me : *Ibid.*, p. 46.

49. A thief entered a house and took what he found in it and then came out. The owner of the house being alert uttered : How omnious this night is : On hearing this the thief added : It is not ominous to all : *Ibid.*, p. 46.

50. Muhammad b. Hafs narrated :

We came to pay a visit to Bishr. b. Al-Haris who was ill, when a man asked him : Favour me with some counsel ! At this Bishr uttered : If you visit a patient, don't sit long by him ! *Ibid.*, p. 47.

51. Abu-Al-Tayyab Al-Tabari, the judge gave a shoe to a shoe-maker for repairs, and whenever he passed by him (the shoe-maker) he demanded execution of the order, and wnehever the sohe-maker saw him, he (shoe-maker) took the shoe and dipped it into the water, and said : Now, Now ! As the shoe-maker was delaying in mending the shoe, he said to him (shoe-maker) : I gave you the shoe to mend and not to teach it swimming ! *Ibid.*, p. 48.

52. A certain vizier complained of the pressure of works. So Abu-Al-Ayna said to him : May God not show me the day of your leisure ! *Ibid.*, p. 51.

53. Abu-Al-Ayna complained to Obaidullah b. Sulaiman about the delay of his allowance. Obaidullah said : Had I not written about you to such and such offier, what has he done in your case ? He replied : The officer dragged me on the thorns of delay ! Obaidullah returned : You selected him (the officer) ! He then stated : I am not to blame. Moses selected 70 persons from his people and none of them proved to be the follower of right course, so the violent earthquake overtook them. The Prophet of God selected Ibn-Abi-Sarah as his scribe, but he joined the disbelievers and apostated ; and Ali selected Abu Musa (Ref. : Arbitration after the battle of Siffin) who gave judgment against him : *Ibid.*, p. 51.

54. A man said to Abu-Al-Ayna : Would that I might see the Devil ! He said : Just look at the mirror ! *Ibid.*, p. 52.

55. Al-Sari narrated :

I was down with diarrhoea at Tartus. These readers (of the *Quran* or Hadith) came to visit me, sat down for a long time and said : If you like you may pray to God. At this, as I was disgusted with their prolonged sitting, I stretched my hands and said : O my God, teach us the proper manner of visiting the sick ! *Ibid.*, p. 52.

56. Harun Al-Awar (one-eyed) was a Jew but he later on became a true Moslem. He got the *Quran* by heart and learnt the Arabic Grammar. A man was outwitted by him in a debate on a certain problem. The man, being nonplussed in a fit of passion uttered : You had been a Jew and then embraced Islam. Harun rejoined : What you have done is very shameful. (He means that his interlocutor, although a Moslem by birth, really behaves like an apostate). *Ibid.*, p. 53.

57. A man wanted to engage a servant. He asked the servant : How much will you take as wages ? The servant replied : Satisty of

my stomach. The man took him to be a glutton and said : Excuse me. The servant then added : Keep me, I shall fast every Monday and Thursday. *Ibid.*, p. 54.

58. Amr b. Al-As forbade his soldiers to receive what the people offered them, when a man stood before him and said : Take an army of stones which will not eat and drink. Amr then scolded him saying : Be off, O Dog : The man then returned : I am one of your soldiers, and if I am a dog then you are the Commander of dogs. *Ibid.*, p. 54.

59. Jafar b. Yahya expressed to one of his comrades his desire to see a man whom the divine favour befits. His comrade said : I shall show you the man. He then took the mirror and brought it near his face. *Ibid.*, p. 55.

60. Buhlul passed by some people at the foot of a tree. They said : O Buhlul ! Would you climb this tree and take 10 Dirhams as reward ? Buhlul answered in the affirmative and they gave him 10 Dirhams which he put into his sleeve and then looked towards them and said : Let me have a ladder. They said : It was not a part of our terms. He replied : It was a part of mine. *Ibid.*, p. 56.

61. Buhlul was asked to give his verdict on the law of inheritance in respect of a man who died leaving behind no property but one son, one daughter and a wife. Buhlul stated : The son will take orphanage, the daughter bereavement, the wife the ruined house and there is nothing for those who take the residue. *Ibid.*, p. 57.

62. A joker was asked : How are you going on with your Religion ? He replied : I tear it by sins and then patch it up by asking pardon of God. *Ibid.*, p. 57.

63. A Magian (Majusi) became friendly to one who holds the Doctrine of free will (Qadari). The Qadari asked the Magian : Why are you not embracing Islam ? The Magian replied : I can't embrace Islam until Allah wishes. The Qadari rejoined : Allah has wished but Satan does not. The Magian then said : If so, I am with the stronger of the two. *Ibid.*, p. 57.

64. A man came to Ibn-Aquil and said : I plunge into the stream twice and thrice but do not feel assured if the water enters the whole of my body and also do not feel assured if I am purified. Ibn-Aquil responded : Do not say your Prayer under the circumstances. The man questioned with surprise : How do you say this ? Ibn-Aquil replied : The Prophet of God said : A mad man is exempted from religious duties until he comes to his senses, and he who plunges twice and thrice into the stream and doubts his wash or purification, is a mad man. *Ibid.*, p. 58.

65. An Arab took breakfast with Muzabbad who asked him : How did your father die ? The Arab began to narrate the incident while Muzabbad continued eating. Subsequently when the Arab became alert he stopped the topic and asked Muzabbad : As for your father, how did he die ? Muzabbad replied : Suddenly, and went on eating. *Ibid.*, p. 59.

66. A rogue sat down on the bedstead of a particular house when it gave way and the rogue fell down and broke his leg. The woman of the house was alarmed and cried out : Catch him. At this the rogue told her : You need not be in a hurry, because I am in your midst to-day, to-morrow and thereafter.' *Ibid.*, p. 61.

67. Sulaiman Al-Amash said to his son : Go and buy us a rope which should be 30 cubits in length. His son asked : O my father : How much should it be in breadth ? He replied : It should be equal to the breadth of my misfortune in you. *Ibid.*

68. A black Moor who claimed to be a Prophet and declared himself to be Moses son of Imran was brought to Al-Mamun. Al-Mamun asked the Moor : Bring out your hand white from your side as a symbol of miracle as Moses did so that we may believe in you. The Moor said in reply : Moses worked that Miracle when the Pharaoh claimed to be God, so you should first make the claim advanced by the Pharaoh and thereby enable me to work the Miracle. *Ibid.*

69. A liar was asked : Could you tell me if ever you have spoken the truth ? The liar replied : Had I not the fear of speaking the truth I would have answered in the affirmative. *Ibid.*, p. 62.

70. Yazid b. Abi-Habib heard a man saying : I have come from the bottom of the earth (lower part of the country). So Yazid questioned ; In what condition have you left Korah ? (*Ref.* Sinking of Korah with his wealth into the earth). *Ibid.*, p. 62.

71. A rustic Arab became the guest of an urban Arab who had one wife, two daughters, two sons and a large number of hens. He asked his wife to roast one hen for their morning meals. When the meals were ready all the members including the guest sat together and the host asked the guest to distribute the roasted hen among them. The guest at first excused himself saying : I am not an expert in this art, but if you be satisfied with my division I shall do it. To this all the members gave assent and he commenced distribution in the following manner :—

He first slit the head of the hen, gave it to the host and said : The head is for the head-man. Then he tore the two wings and said : The two wings are for the two sons. Then he tore the two shanks and said :

The two shanks are for the two daughters. Then he tore the rump and said : The rump is for the old lady. He took the chest for himself and said : The chest is for the guest. The following day the host asked his wife to roast five hens and when the breakfast was ready the guest was asked to distribute the same among them. The guest enquired whether he was to divide them in the even number or the odd. On being asked to divide in the odd number, he began the operation saying—" You+Your wife+one hen=3," and he gave them one hen ; " Your two sons+one hen=3," and he gave them one hen ; " Your two daughters+one hen=3 " and he gave them one hen ; " Myself+two hens=3," and he took two hens. Then he was asked to divide in the even number ; so he gathered all the hens and began saying—" You+your two sons+one hen=4," and he gave them one hen ; " The old lady+her two daughters+one hen=4," and he gave them one hen ; " Myself +three hens=4," and he kept for himself three hens.

72. An Arab approached a man who had before him a tray in which there was a fig (Ar. Al-Tin). When the man saw the Arab, he covered the fig with his garment and the Arab marked it. Now when the Arab sat down before the man, the man asked him to recite a verse of the Quran. The Arab then read—" Wa-al-Zaituni wa-Turi Sinina," omitting " Wa-al-Tini (the fig) ?" At this the man inquired : Where is Al-Tin (the fig) ? The Arab replied : It is under your cloth. *Ibid.*, p. 69.

73. An Arab purchased a slave but he was told that the slave was in the habit of urinating on the bed. To this the Arab replied : If he gets a bed he should pass urine on it. *Ibid.*, p. 69.

74. A certain Arab was asked : Which time do you like to die ? He replied : If die I must, I should like to die on the first day of Ramazan. (*Ref.* (1) suspension of Hellish Punishment, (2) Avoidance of the hardship of fasting by death on the 1st day of Ramazan.)

75. Nasr b. Sayyar Narrated :

I asked an Arab : Did you ever suffer indigestion ? He replied : As for your food and your father's food I suffered no indigestion. (I was never fed by you and your father.) It is said that Nasr felt feverish from this answer for days together. *Ibid.*, p. 71.

76. An Arab travelled in a certain direction and was not successful. So he said : I have not profited by this my journey except in the abridgement (Qasr) of Prayer (Permissible to Moslems in journey). *Ibid.*, p. 71.

77. Narrator : Umar b. Shabbah :

Threehundred captives were brought to Man b. Zayedah who

ordered them to be slain when a young boy from among them stepped forward to be slain and said : O Man, your captives must not be killed while they are thirsty : Man then ordered them to be supplied with water. When the captives assuaged their thirst, the boy stood up and said : O Prince, do not kill your guests : Man then set them all free. *Ibid.*, p. 75.

78. A man who performed a sea voyage was asked what was the most surprising of all the things he had seen. He replied : It is my safety. *Ibid.*, p. 80.

79. A man saw two brothers, one of them comely and the other ugly. He, therefore, remarked : Your mother is only a tree which bears one year a plantain and another year a gall nut. *Ibid.*, p. 80.

80. A man blind of two eyes complained about the hardship of blindness when another man who was blind of one eye added : I have half the experience of it. *Ibid.*, p. 80.

81. A story-teller stated : In Heavens there is an angel who utters every day : Beget for death and build for ruination. At this an intelligent man spoke out : The name of that angel is Abul Atahiya (the well-known poet of the Abbasid Court who used the expression after Ali, the 4th Caliph). *Ibid.*, p. 82.

82. A man was asked if he would like that his wife should die. When he replied in the negative and was asked the reason, he said : I am afraid, I might die of joy. *Ibid.*

83. A man claimed to be a Prophet and the people asked him to bring out from the earth a melon as a miracle in testimony to his assertion. The man asked the people to wait for 3 days but they demanded the operation forthwith. At this the man said : God brings out melon in 3 months and you can't wait for 3 days ! *Ibid.*

84. A man posed to be the Prophet Noah and subsequently he was crucified. A witty man (affectedly mad) passed by him and said : O Noah, you have not obtained any thing of your ark (*Ref.* Noah's deluge) save the Main-Mast (cross) ! *Ibid.*

85. Tuways was asked : What are the bad omens you have experienced ? He said : I was born on the day on which the Prophet of God breathed his last. I was weaned on the day on which Abu Bakr expired. I was circumcised on the day on which Umar was murdered. I approached puberty on the day on which Usmar was killed. I married on the day on which Ali was slain. A child was born to me on the day on which Al-Husain was massacred.

86. A man of letters said to a friend of his : You are, by God,

the garden or Paradise of the earth. Then his friend returned : You are the stream which waters that garden. *Ibid.*, p. 87.

87. The people of Kufa complained against its Governor to Al-Mamun who said : I know not among my Governors any one more just than he. At this a Kufan said : O the Commander of the faitful ! If he is so, then it is your duty to give other countries also a share of his justice so that you may be equitable to your subjects in their well-being, and as for ourselves, he must not be reserved for us for more than three years. Al-Mamun then laughed and transferred the Governor. *Ibid.*

88. A witty man invited some people and a parasite followed them. The host took notice of the parasite and he wanted to inform the guests of his knowledge of the parasite's presence, so he said : I do not know whom to thank, you or this one who took the trouble of responding to the invitation without my inviting him. *Ibid.*

89. Sahl b. Sadaqa (Lit. alms) said to Yamut (Lit. he will die) b. al-Mazra in a jocose manner : May God smite you with your name (death) ! Yamut then rejoined hastily : May God make you answer to your father's name (alms) : *Ibid.*, p. 87.

90. A man whose manners were rude, approached a barber and said : O the son of Prostitute ! Come along and trim my moustache. The barber then remarked : If you address people in this manner, then very soon you will get relieved of it (Moustache). *Ibid.*

91. A man hired a house the wooden roof of which was cracking, so he asked the owner of the house : Repair this roof because it is cracking. The owner replied : It will not do you harm, it is extolling and glorifying God, the Exalted. The man rejoined : I am afraid, tenderness will overcome it and then it will prostrate itself before the Almighty. *Ibid.*, p. 89.

92. A witty man entered the Mosque to say his prayer when his slippers were stolen and hidden in the Synagogue (niche) of the Mosque. Then he looked for and found them in the niche, whereupon he uttered : Alas ! When I embraced Islam you (slippers) professed Judaism (*ref.* Synagogue). *Ibid.*, p. 91.

93. A boy said to a Jew : O my uncle ! Wait till I give you a slap. The Jew then returned : I am in a hurry, slap my brother (your father) in my stead. *Ibid.*

94. A beggar was seen in a village. He was asked ! What are you doing here ? He replied : I am doing what Moses and Khizr did. (*Ref.* Quranic story of Moses and Khizr when they arrived at a village they asked the inhabitants thereof for food). *Ibid.*

95. Abu-al-Haris was asked to report on a man. He replied that the man was dead. When he was asked again what his wife inherited from him, he stated that his wife inherited from him four months and ten days. (*Ref.* a period of time to be observed by a Moslem woman after her husband's death, during which period she does not re-marry). *Ibid.*, p. 92.

96. Al-Jahiz narrated :

I saw in the army a very tall woman with whom I wished to be jocose. As we were taking our meals, I said to her : Come down so that you may eat with us. At this she uttered : As for you, you get up so that you may see the world. *Ibid.*, p. 96.

97. A man wanted to purchase a girl whom he asked : Have you got any skill in your hand ? She replied : No, rather I have some skill in my leg (meaning she was a dancing girl). *Ibid.*, p. 97.

98. An intermediary woman came to a man and said : I have a woman who is like a layer of Narcissus flower. Then he married her, but to his surprise he found her old and ugly. Subsequently he charged the intermediary woman for cheating when she stated : By God : I exactly compared her to the layer of Narcissus because her hairs are white, her face is yellow and her legs are green. *Ibid.*, p. 98.

99. A woman gave her maidservant a dirham to purchase for it Harisa (a kind of sweetmeat). The maid servant after a while returned and said : O my Mistress : The dirham is lost. The woman then got angry and rebuked her saying : O Prostitute : Are you speaking to me with the whole of your mouth that the dirham is lost ? The maidservant, therefore, shut half of her mouth with her hand and repeated the statement with the other half when the anger of her mistress was appeased. *Ibid.*, p. 99.

100. Umar b. Al-Khattab passed by Ibn-Al-Zubyr who was yet a boy playing with other boys. When they saw Umar all fled away save Ibn-Al-Zubayr who stood firm in his place. So Umar asked him why he did not flee away with his companions. He replied : O the Commander of the faithful ! I have not committed a crime that I should be ashamed of, and the path is not narrow that I should make it commodious for you. *Ibid.*, p. 102.

101. A boy sat down with some people who were eating, and he began to weep. On being asked the reason for his weeping, he replied : The food is hot. They said : Then leave it till it becomes cool. He added : You are not leaving it : *Ibid.*, p. 105.

102. A certain Egyptian Prince made a bet against his servant on a game of Pigeons. The Prince who had lost the game sent some one

to his minister inquiring about the result of the game. The minister found himself in a great difficulty to express the idea of risk in a polished or figurative manner. Finding him nonplussed a scribe desired him to write to the Prince as follows : O my victorious master, your victorious bird has come with a chamberlain in its service : The minister was so pleased that he ordered a reward to be given to the scribe and wrote out the version suggested to the Prince. *Ibid.*, p. 38.

103. Al-Walid b. Yazid came to Hisham with an embroidered turban on his head. Hisham enquired of him : How much did it cost you ? Al-Walid replied : It cost me one thousand Dirhams. At this Hisham said : This is too much. Al-Walid therefore added : That is because I am surrounded with nobles and you have purchased a girl for ten thousand Dirhams because you are encircled with ignobles. *Ibid.*, p. 41.

104. Al-Jammaz sat down dining at a table opposite to Jafar b. Al-Qasim who was dining at another table with some other people, and the dish for service was being taken from before Jafar and placed between Al-Jammaz and his party, while the dish sometimes contained something and sometimes nothing. At this Al-Jammaz uttered : May God grant the Prince prosperity ! To-day we are no better than ' Asabah ' (those who take the residue and have no fixed or legal share in the division of legacy of a deceased) : Sometimes there remained (in the dish) some thing for us and sometimes the share sholders took the entire and there remained nothing for us. *Ibid.*, p. 44.

105. Al-Amash gave a description of a species of delicious food to a friend of his and inquired if he would like to enjoy it. His friend having replied in the affirmative, Al-Amash took him to his house, and placed before him two dry loaves and a little vinegar, and said : Fall to : At this his friend inquired about the food he described. Al-Amash replied : I did not tell you that I had the food of the description rather I simply enquired about your likes and dislikes for it. *Ibid.*, p. 28.

106. A man stopped as a guest with a family which did not like him. The host, therefore, asked his wife to devise a means by which to know the extent of the guest's stay with them. His wife said : Let us pick a quarrel between us and then refer to his decision. He did accordingly and his wife asked the guest : May God bless you to-morrow morning in your journey (your departure from our midst) : Which of us is more unjust ? The guest replied ! May God bless me in my stay with you for a month : I do not know which of you is more unjust. *Ibid.*, p. 53.

107. Abu Kab said to Al-Jammaz : I have a great affection for my mother who is at Basra. I am afraid that she may be drowned if I take her to Bagdad by boat and she may get tired if I carry her on the back. So what do you advise me to do in the matter of her conveyance ? Al-Jammaz replied : Just take a bill of exchange or a letter of credit for her. *Ibid.*, p. 60.

108. Jummzz was asked : Who will dine with such and such person ? He replied : The highest and lowest of creatures (meaning the angels and the flies) will dine with him. *Ibid.*, p. 61.

109. Two poets came to a certain grammarian and said : Hear our verses and say which of us is a better poet. The grammarian heard the verse of one of them and pronounced : That one will be better. The one (whose verse he heard) objected saying : You have not heard the verse of that one : The grammarian responded : His one will never be more odious than your one. *Ibid.*, p. 61.

110. A man was given to drink cold water. He again returned and asked for it when he was given hot water. So he remarked : Perhaps your refrigerator contracts a fever which comes every fourth day. *Ibid.*

111. A weaver claimed to be a prophet at Kufa and the people gathered about him and said : Fear God and His punishment : Have you ever seen a Prophet who is a weaver by profession ? The weaver replied : You only want that your Prophet should be a money changer or Banker. *Ibid.*, p. 63.

112. Hajib b. Zararah sought an interview with the Persian monarch. The royal gate-keeper asked him who he was and he replied that he was an Arab (an ordinary Arab). Now when he was admitted and he stood before the monarch and the monarch asked him who he was, he replied that he was the Chief of the Arabs. The monarch, therefore, questioned : Did you not tell the gate-keeper that you were a common Arab ? He replied : Yes, while at the gate of the Monarch, I was an ordinary Arab, but when I came into his presence I became the Chief of the Arabs. The Monarch was so pleased with his witty answer that he uttered : Fill his mouth with Pearls : *Ibid.*, p. 69.

113. When Hammadah, daughter of Isa, wife of Al-Mansur died, Al-Mansur together with Abu-Dalamah and others stood by the grave waiting for the arrival of her bier. Al-Mansur asked Abu Dalamah : O Abu-Dalamah : What have you prepared for this grave ? Abu-Dalamah replied : O the Commander of the Faithful ! I have prepared Hammadah daughter of Isa for this grave. At this the people enjoyed a laugh. *Ibid.*, p. 73.

114. After the death of the Commander of the faithful Abul Abbas, his wife, Umm-Salmah, daughter of Yaqub son of Salmah was not in the habit of smiling. So the people sent Abu-Dalamah to her with the hope that he might be able to cause her to smile. Abu-Dalamah recited before her an elegy in which he mourned for the Commander of the faithful. On hearing the elegy she uttered : I find none aggrieved like you and me for the Commander of the faithful. Abu-Dalamah then added : May Allah be compassionate on you : We are not equal in grief : You have got a child by him while I have no child by him. She then laughed and said : Had Satan been personified you could have caused him to laugh. *Ibid.*, p. 74.

115. A man borrowed from Abu Hamid, the jurist, a book. Abu Hamid one day found him taking grapes on it. The man subsequently asked him for a loan of another book. This time Abu Hamid told him to see him at his residence for the purpose. When the man arrived Abu Hamid offered the book to him in a tray. The man inquired with surprise and Abu Hamid stated : This is the book you wanted and this is the tray on which you will place what you will eat. The man then became conscious of the fault he had committed. *Ibid.*, p. 83.

116. Al-Hajjaj was one day left alone from his army and was met by a Bedouine whom he asked : How do you find Al-Hajjaj ? The Bedouine replied : He is a great tyrant. Al-Hajjaj then rejoined : Why don't you complain against him to Abdul Malek ? He said : Abdul Malek is more unjust and oppressive. The army of Al-Hajjaj then joined him and he said : Mount the Bedouine. Now when mounted, the Bedouine enquired and was told that it was Al-Hajjaj. At this the Bedouine ran behind Al-Hajjaj and said : O Al-Hajjaj ! Nobody will be aware of the secret which is between you and me : Al-Hajjaj then laughed and let the Bedouine go. *Ibid.*, p. 84.

117. A man shot an arrow at a sparrow and missed the aim when another man said to him : You have done well. The archer got angry with him and said : Are you joking ? The man said : No, rather you have done good to the sparrow. *Ibid.*, p. 89.

118. A man was asked whether he was learning the Quran by heart. On having replied in the affirmative he was questioned : What is the beginning of al-Dukhan ? (*Ref.* The Quranic Chapter, Al-*Dukhan* which literally means ' Smoke '). He replied : The beginning of Al-*Dukhan* (smoke) is green ' fuel.' *Ibid.*, p. 89.

119. A man passed by Muzzabbad who was sitting in a thoughtful mood. The man asked him : What are you thinking about ? He said : I am thinking of pilgrimage on which I have resolved this year. The

man asked him again : What preparations have you made for it ? He replied : I have prepared al-Talbiah (uttering of Labbaik—" Here I am for your service " during pilgrimage) as I am unable to do anything save this. *Ibid.*, p. 89.

120. Al-Mahdi asked an old Arab woman with whom he became familiar : To whom do you belong ? She replied : I belong to the tribe of Taiy. He asked her again : What has prevented Taiy from being one like Hatim ? She answered : One who has prevented the kings from being one like you, has prevented Taiy from being one like Hatim. Al-Mahdi became so pleased with her answer that he gave her a reward. *Ibid.*, p. 96.

121. Al-Mamun became angry with Taher b. Abdullah. So Taher intended to see him. Meanwhile he received from a friend of his a letter wherein nothing was mentioned but ' al-Salam ' (Peace) and in the margin thereof was noted—" Ya Musa " (O Moses) :. He went on thinking over it but failed to realise the underlying hint. He had an intelligent girl who said : The writer of the letter alludes to the Quranic story—" O Moses ! The pharaoh and his people are conferring together in order to kill you." He then became alert and abstained from seeing al-Mamun. *Ibid.*, p. 98.

122. A man said to some women : Truly you are the constant companions of Joseph. They said in return : Then, who threw him into the dark well, you or we ? (*Ref.* The story of Prophet Joseph who was thrown into the dark well by his step brothers and his becoming the Ruler of Egypt later and so on.) *Ibid.*, p. 100.

123. Abu Hanifa narrated :

A woman imposed on my credulity. She drew my attention to a purse lying on the street. I thought that it was hers, so I picked it up and took it to her. She said : Preserve it yourself until its owner comes. (*Ref.* The problem of fiqh in regard to luqta and laqit—jurisprudence—picked up goods.) *Ibid.*, p. 101.

124. Sumama narrated :

I went to visit a friend of mine who was sick leaving my ass at his gate as I had no servant with me to watch it. On my return I was surprised to find a boy on its back. I asked him : Have you mounted my ass without my permission ? The boy replied : I was afraid if it would run away, so I held it for you. I said : It had better run away than stayed. The boy rejoined : If this be your idea of it, just suppose that it has gone away. Give it to me and accept my thanks. At this I was so confounded that I did not know what to say in reply. *Ibid.*, p. 103.

125. A Syrian came to al-Madina and went to the house of Ibrahim b. Haramah, where he found a little girl of his playing with mud. He asked her : What is your father doing ? She replied : He has gone to a generous man and we have no information of him for a pretty long time. He said : Sacrifice for us a she-camel because we are your guests. She said : By God, We have no she-camel. He said : However, sacrifice a she-goat for us. She said : By God, We have no she-goat. He said : However, sacrifice a hen for us. She said : By God, we have no hen. He said : However, give us an egg. She said : By God, we have no egg. He said : Then what your father has said in his verse is untrue, to wit, " Many a camel and she-camel I sacrificed in the beginning of showers." She replied : That is the act of my father. It is he who has reduced us to such a state that we possess nothing. *Ibid.*, p. 104.

126. Bishr al-Hafi narrated :

I knocked the door of al-Muafi b. Imran when I was asked : Who are you ? I said : I am Bishr al-Hafi. A little girl from within the house then spoke out : Had you purchased shoes at the cost of two Danks, the name of al-Hafi (Lit. Barefooted) would have gone away from you. *Ibid.*,

127. A boy asked a witty man : Where are you going ? The man replied : I am going to the Gaol. The boy added : Proceed with all speed : *Ibid.*, p. 105.

128. A drunkard was brought to a certain ruler under arrest and the ruler asked the people to smell his breath but they said that the smell of his breath would not clearly prove his case, so the ruler asked them to make him vomit. At this the drunkard argued : If I fail to vomit wine who will be responsible to me for my supper ? Al-Iqd—part IV, p. 380.

129. A Bedouine was asked : Why do you not fight ? He replied : While I hate death on my bed, how can I go to it running ? *Ibid.*, p. 381.

130. Muawiya asked Jariah b. Qudamah : What had made you so contemptible to your people that they named you as Jariah (Lit. Slave girl or girl) ? Jariah asked in return what had rendered you so despicable to your people that they named you as Muawiya (Lit. Bitch) ? *Ibid.*, part II, p. 327.

131. Al-Mahdi said to Sharik, the judge : I am told that you were born in a date-basket. Sharik replied : O the Commander of the faithful : I was born at Khorasan where the date-baskets were very costly. Al-Mahdi said : I find you a very wicked Fatimid. Sharik responded : By God, I love Fatima and her father. Al-Mahdi said : By God, I too love them but I saw you in dream paying no attention

to me and that is due only to your hatred for us. So I must slay you. Sharik rejoined : O the commender of the faithful ! One cannot be slain by the evidence of dream and your dream is not like that of Joseph. (*Ref.* The Quranic story that Joseph saw in dream eleven planets, etc. prostrating to him). *Ibid.*, part II, p. 332.

132. A kid was placed on the dinning table of Al-Mughira, the governor of al-Kufa. A Bedouine came to him and stretched his hand towards it and went on eating hastily. At this al-Mughira said : You are eating it with rancour as if its mother gored you. The Bedouine replied : You are compassionate on it as if its mother gave you suck. *Ibid.*, p. 334.

133. When Malik b. Asma was put in the Prison of Al-Kufa a man of Murra family leaned on him and asked him : Do you know, how many of you wa killed in the Pre-Islamic age ? Malik replied : As for the Pre-Islamic age, I do not know but I know whom you killed of us in Islam. The Murrite asked : Whom did we kill of you in Islam ? Malik answered : Me You have killed by the stink of your two armpits. *Ibid.*, p. 335.

134. An Arab said : Last night I saw Paradise in dream and I saw all the castles there. I enquired and I was told that they were meant for the Arabs. One of the slaves then asked him : Did you climb the upper chambers ? He said : No. The slave said : They are meant for us. *Ibid.*, p. 338.

# THE PRESS AND THE LAW OF CONTEMPT OF COURT IN INDIA

*(A Critical Study)*

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THE LAW of contempt of court in relation to the Press in this country[1] has come in for a good deal of criticism in the Press as well as on the Bench. The unhappy character of the law arises mainly from two facts : first, the elasticity of the legal definition of contempt of court, especially with reference to comments on the conduct of a judge or judicial proceedings, and second, indiscriminate exercise of summary power by attachment in all cases of contempt.

Chief Justice Wilmot's doctrine of constructive contempt,[2] which is the *locus classica* of the law of contempt of court in our country and which has been glorified beyond all reasonable limits and made a fetish of by the English and Indian judges and unhesitatingly relied on in innumerable cases, is without any foundation in history. Sir John Charles Fox by laborious and scholastic researches has demonstrated that Wilmot's proposition that contempt of court is punishable by summary process of attachment at the common law of England from time immemorial is an innovation of the eighteenth century and has no sanction in earlier history. He has shown that prior to the eighteenth century libels upon courts of justice were punishable in England at the common law only after trial in the ordinary course and not by summary process.[3] Fletcher, J., in *Taeffe v Downes*[4] while refusing to be bound by Wilmot's opinion described it as " the hasty and warm ebullition of mind fraught with arbitrary notions irritated and excited by severe attack upon his whole court, especially upon his venerated and adored Chief Justice, and the very reverse of what is called a considered, digested and ulterior opinion." Indeed the fewness of cases cited by the Chief Justice in favour of his contention lends but scant support to his doctrine.

Besides, Wilmot's ' high Tory conception of kingship ' is an anachronism and is not in accord with the exigencies of modern times.

[1] For the law of constructive contempt my articles published in the Calcutta Review, May 1945, may be seen.

[2] Wilmot's Notes and Opinians, p. 243.

[3] Fox, The History of Contempt of Court (1927).

[4] 1883, 13 E. R. 15 note.

Wilmot maintained that an affront to the judge is an insult to the king because the judge is the representative of the king deputed to minister justice on His Majesty's behalf. His theory might have its justification in his own time when the autocratic traditions had not completely died down and when under the dubious leadership of Wilkies the dignity of the court would be ruffled without the least hesitation and nothing short of a summary process of attachment could be an effective safeguard against those bent upon discrediting the court and holding the judges up to ridicule. Wilmot said that 'arraignment of the justice of the judges was arraigning the king's justice' and required to be dealt with with severity and promptitude. The divine right theory is now an exploded dogma; the king no longer claims to rule by divine right. The sovereignty of the monarch has yielded place to the sovereignty of the people. The king can no longer be held to govern and distribute justice except in a figurative sense. Kingship has no other justification than the exigency of the parliamentary system of government. The king is in no sense beyond the reproach of the people. The glorious Revolution of 1688 in England, the abdication of Edward VIII, the French Revolution of 1789 and the Russian Revolution of 1917 have amply demonstrated the truth of it. In a democracy an institution has a claim to its existence and continuity only on the ground of expediency and utility. And no useful purpose is served by assuming the theoretical presence of the king in the court of justice. Further, the judges who minister justice are not in any real sense representatives of the king; they are in a very real sense representatives of the people. They are not appointed by the king nor are they removable by him. Since they are representatives of the people appointed to administer justice they are responsible to the people; in other words, they cannot claim immunity from criticism. In these days every public servant, be he an executive officer or a judicial officer, must stand or fall according to his own worth unaided by the props and support of the king. Wilmot's theory has long outlived its usefulness and should now be given a decent burial.

Wilmot said that the object of arming the courts with summary powers of attachment was "to keep a blaze of glory around them and to deter people from attempting to render them contemptible in the eyes of the people." It is true that the condition precedent to the maintenance of the dignity of the court and the preservation of the majesty of law is that the court must be placed upon a pedestal at the foot of which the people must bow down and worship it. And to that end the judges who are entrusted with the administration of justice

must be above suspicion and reproach. They must be highly esteemed by the people so that the latter may approach the former for justice with full confidence in their ability to do it. But the question is, can the judges keep a blaze of glory around them or hold themselves high in the estimation of the public by stifling all criticism against their conduct and character ? Is it not in the hands of the judges to maintain a halo of dignity around the court by the unimpeachability of their character and their scrupulous regard for truth ? Ruthless suppression of opinion critical of the administration of justice in an arbitrary manner will rouse popular suspicion in the impartiality and integrity of justice rather than lull it. Repression of criticism is a virtual admission of weakness if not guilt, and instead of rendering the court venerable will make it vulnerable. To attempt to maintain the dignity of the court by dealing with the contemner arbitrarily and severely is to start at the wrong end. The prestige and dignity of the court can be truly preserved and augmented only by the judges so behaving as not to give any cause for adverse comment upon their motive and ability. To make the administration of justice immune from criticism by the drastic exercise of punitive measures is to render the judges responsible only to themselves ; and responsibility to no one but oneself is a precarious guarantee of right action. Unlike English and American constitutions our constitution provides no safeguard against judicial misdemeanour. Sections 40 and 86 of the Government of India Act, 1935, prohibit the discussion of the conduct of any judge of the Federal Court or a High Court in the discharge of his duties in the Provincial as well as Federal Legislatures.

Criticism is not destructive only ; it is a great constructive force. The court can in reality render itself an object of veneration in the public eyes only by allowing free criticism of the administration of the justice and by vindicating itself in the face of that criticism. " Justice," says Lord Atkin, " is not a cloistered virtue : she must be allowed to suffer the scrutiny and respectful, even though outspoken, comments of ordinary men." Indeed, the potency of criticism as a means of keeping the administration of justice free from all blemishes cannot be too highly expatiated upon. Criticism often serves to bring into day light obscure mistakes or abuses that might otherwise remain uncorrected. " If there is not public criticism there are bound to be hushed-up scandals." The fear that any misdeed on the part of the judges will be dragged out into the glare of publicity will keep the judges alert and in the right track. With the rapid growth in the volume of legislation in the modern states the judges are called upon to exercise

power within wider and wider province. This widening of the authority of the judges has made it imperative that adequate safeguards against their abuse of power should be provided. It is, therefore, of paramount importance that there must be ample scope to criticise the judges and their judicial actions whenever it appears to the observer that they have strayed beyond the system of habits marked out for them by the character of their functions. In fact, it is only the certainty that the searchlight of criticism will inevitably be turned on the judges whenever they transgress the limits of their legitimate authority that will keep the judicial temper at its proper level. There is no denying the fact that any Press criticism of the judges with reference to a case which is under discussion before the court is a clear obstruction of justice and should be dealt with promptly and severely. But when a case has ended and the findings of the court have been put into execution the judge and his findings are given over to the judgment of the people. And it becomes the duty of the Press to examine what the judge has done, to analyse his reasoning, to appraise his results and to discuss his conduct. This is specially so in a system where the decision of the judges form precedents which are not merely declaratory but also creative of law.

There is no warrant for the supposition that the judges are infallible. They are human beings subject to all normal human sentiments and feelings; and as such prone to err as any other of their species. As Professor Laski says, "Like Lord Braxfield, they may be incapable of common decency; like Mr. Grantham, their political convictions may be imported into their judicial findings."[1] How judicial temper may overflow its boundaries and how judges may be led away by personal prejudices and predilections beyond all limits of decency and decorum may be illustrated by the remarks of two judges of the Indian courts. Mr. Wickden, an I.C.S. judge, of a Nagpur court in course of his judgment in a case arising out of the Disturbances in August, 1942, observed, "I am more inclined to take the view that because he is an official with a sense of responsibility he might take to truth more than an ordinary citizen whose predilection for truth unfortunately in this country has never been greatly marked." Mr. Justice Pollock of the Nagpur High Court in reviewing the case made a fitting observation. His lordship said, "This remark was quite unnecessary for the decision of the case, and was bound to cause offence. It should, therefore, not have been

[1] Procedure for Constructive Contempt in England, *Harvard Law Review*, Vol. 41, at p. 1032.

made. General remark of this sort are out of place in a judgment."[1] In another case Chief Justice Terrell of the Patna High Court remarked, " .....having regard to the habits of the people in this particular part of the world where the giving of false evidence, however deplorable may be, is not considered an offence which is fatal to a man's reputation to say the least of it, I do not think that much importance need be placed on that fact."[2] Such prejudicial remarks on the character of a nation or any section of it are highly provocative and call for strong condemnation from the public. It will be nothing short of dereliction of duty on the part of the Press which serves as the spokesman of the public to let go such unwarranted attacks unchallenged.

But while extolling criticism as a safeguard against the abuse of power by the judges it is by no means suggested that the cause of justice will be furthered by keeping the court and the administration of justice exposed to irresponsible and thoughtless criticism. Unfettered criticism is as harmful as ruthless suppression of it amounting to its virtual prohibition. It is, therefore, material to discuss the limits within which the administration of justice should be criticised without any penalty of any kind and the method by which all unjustifiable criticisms should be dealt with.

There is a consensus of judicial opinion that the gravamen of the offence of contempt of court is interference with the administration of justice; that is, the jurisdiction in contempt is to be invoked exclusively in the context of impediment to the course of justice, whether the impediment arises from scandalising the court, creating prejudice against a litigant party to a pending suit, or abusing a party, witnesses or advocates, concerned in a litigation during its pendency. But whereas there is a complete agreement as regards the essence of the offence among high authorities there does not seem to exist the same measure of agreement as regards what ' interference with the course of justice ' exactly is. In the case of contempt of court *facie curiae* there is not much difficulty in determining what action or utterances may hamper the due administration of justice, for here the interference is direct and naive. But it is not so easy to say what remarks published or uttered outside the court are likely to actually hinder the course of justice either by undermining public confidence in the justice of the judges, or by prejudicing the judges, jurors or witnesses. Occasions are not rare when the judges failed to agree among themselves as to whether the

[1] *Amrita Bazar Patrika,* Dak edition, 23rd May, 1943.
[2] See *In re* Murli Manohar Prasad, 8 Pat. 323, 331.

impugned passages fell within the meaning of the term 'interference with the due administration of justice.' This ambiguity of the term has imparted such a degree of elasticity to the legal definition of the offence that it has in consequence left the judges a wide discretion in the application of the jurisdiction in contempt. Wherever there is discretion there is room for abuse of power; and in the judicial sphere no less than in the executive sphere discretionary authority on the part of the government must mean insecurity for legal freedom on the part of its subjects. In fact it can hardly be said that the judges in England and in India have always applied the rigour of the law with punctilious regard for the interest of justice. In recent years there has been in evidence a remarkable tendency among the judges to show a culpable intolerance of the most innocuous and legetimate criticism of the administration of justice or of the conduct of the judges. There are some cases in which the judges may well be charged with having abused their power to punish for contempt for the purpose of gratifying their personal dislikes. There are others in which they did not observe any distinction between " criticism " and " real obstruction." It is the most hedious defect of the law as it is applied in practice that it does not make any distinction between real obstruction and criticism. The law is singularly one-sided. It checks, and checks by the application of a very drastic measure, only such interference with the course of justice as is caused or likely to be caused by public criticism of the administration of justice or of the conduct of a judge. It ignores a signally important fact that the criticism of a judge or of the judiciary may be made—and should be made—in the interest of the standing of the court. Criticism may be made not to vilify a judge or to hold the judiciary up to public obloquy but to protect the court by bringing home to the judges that by their blameworthy conduct they are undermining the confidence of the public in the impartiality and integrity of justice and losing their hold on the affections and respect of the people.

In the *Leader* case[1] the learned judges of the Allahabad High Court fell into the error of confusing criticism with real obstruction. If the passage published in the report was all on which the court took action it may reasonably be said that the court did not take the correct attitude. It appears from the report that the article was a comment on the Bar Council election. The burden of the article was that the members of the local bar did not exercise their right of electing their representatives to the Bar Council with sole regard for the interest of justice with the

[1] *In re Advocate of Allahabad*, A.I.R., 1935, Allahabad, p. 1.

result that comparatively undeserving lawyers had been raised to the Bench. Obviously the purpose of the author was not to belittle the recently appointed judges. It is true that the epithet 'undeserving' was undesirable and somewhat derogatory to the dignity of the judges concerned. But the derogation was not so grave as to shake the confidence of the public in their ability to dispense justice. Mukherjee, J., in his judgment in the *Amrita Bazar Patrika* case referring to the *Leader* case remarked, "I may also be permitted to say that if the extract from the publication as given in the report is the only offending passage I should be very reluctant to hold that it was any contempt of court at all."[1] Indeed if it was at all a contempt it was in the words of Chief Justice Jenkins of the Calcutta High Court a technical contempt and was not a fit case to deal with by summary method. Besides, even if it could be held that the passage was such as would substantially interfere with the course of justice by calling into quetsion the ability of the judges who had then been elavated to the Bench from the bar, the court should not have used its extraordinary jurisdiction for the obvious reason that the evil that the article sought to check was far greater than the one that it gave birth to. The appointment of judges is a matter in which the people are vitally interested. If these appointments do not go to worthy men it is the undoubted right, nay the duty of public writers, as the guardians of public interests, to draw the attention of those who are responsible for having placed incompetent men in these important offices to the fact that they do not properly discharge the trust reposed in them by the public. In discharging this duty a public writer may incidentally question the ability of the judges, but the wrong done to the judges is infinitesimally small in comparison with the wrong to the cause of justice that he sought to prevent. Lord Erskine of England said that the constructive contempt depends upon the inference of an intention to hamper the course of justice.[2] The tenor of the article in this case does not betray any trace of the author's intention to bring the judges into contempt. It was purely in the interests of justice that he drew the pointed attention of the members of the bar to the fact that they had failed in their duty to elect the right men. But the high authorities seem to incline to the view that the intention of the contemner is irrelevant to the determination of his guilt. It is the effect of the article that is the paramount consideration that weighs with the judges. But while laying stress upon the effect of an article

[1] 61 Cal. L. J., at p. 449.
[2] *Ex parte* Jones, 1806, 13 Ves. 237.

on the public minds as the only important factor in assessing the guilt of an accused the existing law takes into account only one aspect of the effect, namely, whether the passage objected to actually brings or tends to bring the judges or the judiciary into contempt. It totally ignores the most important aspect, namely, whether it is calculated to keep the administration of justice above suspicion by bringing into light any lapse on the part of the judges thus telling them that they must correct themselves on pain of losing their hold upon the trust and confidence of the people.

The decision of the Calcutta High Court in the *Amrita Bazar Patrika* contempt case[1] of 1935 is also open to the same criticism. In this case the said paper charged the judges of the Calcutta High Court with hob-nobbing with the Executive and having thus lost their independence. It was no vilification of the judges nor was it a malicious imputation upon their character. A general statement of this nature cannot be held to undermine the confidence of the public in the integrity of the judges concerned and therefore, could not impede the course of justice except in a very remote and indirect way, or, what Justice Mukherjee said, in an " ideal sense." Sir George Rankin and Lord Atkin of the Judicial Committee of the Privy Council during the hearing of the recent *Hindusthan Times* contempt of court appeal case expressed doubt whether this passage could be held as contempt of court. Sir George said, " I was only doubting whether to say that of the judiciary at large or as a whole would be contempt of court." Lord Atkin remarked, " If we had to consider this case, I should have been doubtful myself whether this amounted to contempt of court, if that is all that there is to it, I should be very doubtful. I do not know how if you do hob-nob with an executive you lose your independence. If you order lunch with a Chief Secretary, is that losing one's independence ?" [2] To deal with a mild discussion of the conduct of the judges of this nature by the application of summary powers is the virtual obliteration of the freedom of the Press to comment on the administration of justice. Cases are full of warnings that " the jurisdiction of committing for contempt being practically arbitrary and unlimited should be most jealously and carefully watched and exercised, .....with the greatest reluctance and the greatest anxiety on the part of the judges to see whether there be no other mode which is not open to the same objection of arbitrariness and which can be brought to bear upon the subject."

[1] 61 Cal. L. J. 376.

[2] Reported in the *Amrita Bazar Patrika*, Dak edition, 10th February, 1944.

Secondly, it was a criticism and not an actual obstruction of justice. The purpose of the article was not to ridicule the judges or lower them down in the estimation of the public. It was to caution the judges that they were straying away from their legitimate sphere. It stands past dispute that the administration of justice is a vital concern of the public. If the judges fail to act up to what is expected of them, if they are found doing consciously or unconsciously anything which reflects on their good will, independence or impartiality, it is the duty of the Press to focus the attention of the judges on their lapses and failings so that they may rectify them and pull themselves up. The judges should know that their conduct is giving rise to popular suspicion in the integrity and impartiality of justice, otherwise how can they be expected to mend their conduct? On the other hand, the very fact that no judicial misconduct or delinquency can go unchallenged and uncensured at the hands of the Press will keep the popular suspicion in the judicial administration at a low ebb. It is true that in the discharge of its duty the Press may outstep the limits of decency and fair criticism. But the question is, will such publication impair public confidence more than the unseemly conduct of the judges to which it refers will do? If the administration of justice is made a forbidden subject for the Press to discuss it will affect their dignity and prestige more than any adverse comment will do when the people know that a watchful vigilance is kept by the Press over the administration of justice.

In an interesting article in criticising the *New Statesman* case[1] Prof. Laski opines that there are cases in which the conduct of the judges is so open to question that any expression of opinion to that effect should not be liable to any penalty of any kind. In the treason trials of 1794 the conduct of the judges was so biased that no one can read the proceedings of those cases without noticing it; Mr. Justice Grantham of England was so fanatically and militantly conservative that no liberal candidate could hope for an impartial hearing from him. He further says that it is difficult to expect a fair trial from a Roman Catholic judge in a birth control trial; that a judge who makes no secret of his anti-communistic views is not a fit person to preside over a case in which a communist is charged with the violation of the Seditious and Blasphemous Libels Act. He emphasises that it is not so much an adverse comment upon the conduct of a judge, calling into question his impartiality and independence, that tends to destroy the public confidence in the integrity of justice as the blameworthy conduct of the judge which

[1] 344 T.L.R. 303.

provokes such comment. He insists that there are cases which the judges of a particular country are not fit to adjudicate upon by reason of their very outlook on life and the traditions in which they are brought up. Like those of other men the political and social convictions of the judges are so deep-rooted that they cannot decide a case without importing their social and political views into their judicial findings. He adds that if any newspaper were to remark that a communist could not expect a fair trial from the judges of a capitalist state it would but say the strictest truth. He also insinuates that the attitude of the judges in labour cases in England is also open to the same charge.[1]

But what to do with the Press when it exceeds the limits of legitimate criticism? Suppose there is an undeserved and unwarranted attack upon the judiciary or a judge or there is a scurrilous abuse of him in the worst possible taste such as is examplified in *re Surendranath Banerjea*[2] or *Rex v Gray*.[3] Should such attack be immune from legal penalty? The answer is a definite 'no.' Whenever there is an unjustifiable attack upon the judges having the effect of weakening their hold on the respect of the people, the court will undoubtedly be justified in exercising its disciplinary jurisdiction against the miscreants. But the procedure must not be the summary process of attachment. This compendious mode of proceeding is arbitrary, unjust and an unnatural anomaly in a democratic system of government.

In the summary mode of procedure by attachment every safeguard of an ordinary trial is suspended. The accused person has to labour under various disadvantages. In opposition to the most elementary principles of jurisprudence that no one should be a judge in his own case, in contempt proceedings the judge combines in himself the roles of accuser, trier of facts, and intentions and judge. Even worse is the position when we pass from contempt of the judiciary as a whole to contempt of a particular judge or judges. Here the judge against whom the shaft is directed is himself the judge of whether the criticism constitutes contempt. It is a well-established principle that a judge who is, even if remotely, interested in a case must not preside over that case. Besides, the double role which a judge plays in a contempt proceeding —the role of a judge and a prosecutor—is a very difficult one which only a few, with prodigious capacity to rise above the ordinary human level

[1] Procedure for Constructive Contempt in England, *Harvard Law Review*, Vol. 41, p. 1036.

[2] 10 Cal. 109.

[3] (1900) 2 Q.B. 32.

and to subordinate their role as prosecutors to their role as judges, can play with success. There is always the subtle danger of bias consciously or unconsciously operating in them : there is always the danger that there may be miscarriage of justice when the judge is not strong enough to prevent his wounded vanity from getting the better of him. Unlike in other criminal proceedings here there is no jury to help him. He himself passes upon facts as well as the law. Such a power in the hands of an angry man is liable to abuse ; and judges being human are susceptible to anger like other men. A judge acting under the influence of a strong feeling of insult can hardly be expected to bring into execution that impartiality of mind and honesty of purpose which are essential for rendering a just decision. It is regarded by our law as of great importance that the administration of justice should be above any possible suspicion of bias. As the Lord Chief Justice of England said, " Justice should not only be done, but be manifestly and undoubtedly seen to be done."[1] Further it is a basic principle of our criminal jurisprudence that a person is presumed to be innocent until the contrary is proved. But contrary to this principle the judge in a contempt case starts with the presumption of the guilt of the accused and the onus of proving his innocence is thrown upon him. He has not even adequate opportunity to defend himself. He cannot call witnesses to prove his position. He is practically at the mercy of the judge, and often the judge whom he has offended.

This method of procedure is highly objectionable and is a crude appendage to our legal code. Its effect has been to enforce silence on the part of the Press when the public interest requires fullest publicity and the closest criticism of what is going on in the administration of law. In fact the Press in our country is chary of criticising faults in the administration of justice. That this method cannot serve the ends of justice is evident from what Mr. D. N. Pritt recently said in behalf of the evidence in the *Hindusthan Times* appeal case in the Privy Council. Maintaining that the conviction of the Editor of the *Hindusthan Times* by the Allahabad High Court was the result of not a fair trial Mr. Pritt asserted, " The essence of it is that the learned Chief Justice filled all the following roles. He was the only victim of the criticism. He directed the prosecution, that is to say, he directed that prosecution should take place. He sat as judge at every stage of the prosecution. At the same time he conducted the proceedings as, in effect, the prosecutor, eliminating the Government Advocate almost entirely from

[1] *R. v. Hurst*, 1924, 1 K.B. 256.

the proceedings. He was the witness as to the most vital facts in the case. He examined the witness without notice to the defendants and behind their backs and then brought witness into court, of course, and then examined him."[1]

It betokens no popularity of this method in England that in recent years on five occasions attempts were made in Parliament to do away with this iniquitious procedure by legislative action. But on all of these occasions proposals were dropped either on account of changes in the administration or heavy pressure of business in the Houses. It is significant that on none of these occasions was there any opposition to the measure. Men of legal eminence like Lord Fitzgerald, Lord Bromwell, Mr. Birrel deprecated this procedure in the strongest terms. In the course of the debate in the House of Lords in 1883 Lord Fitzgerald dealt with it thus : " The doctrine of constructive contempt was one which he was not inclined to favour. It appeared to him if dealt with at all, it should be dealt with on some broad foundation. The present course of proceedings was exceedingly objectionable. If an article in the newspaper appeared which was alleged to be such a contempt, which was one from which an inference could be drawn that it was intended to interfere with the administration of justice, the party was called up summarily, and the matter inquired into, the judge being at once judge of the law, of the fact of the intention, of the sentence, and his decision was without any power of review..... The objection to the present system were that it was uncertain, undefined, and depending upon capricious discretion."[2] In 1906 and 1908 the House of Commons resolved " that the jurisdiction of judges in dealing with contempt of court is practically arbitrary and unlimited and calls for the action of Parliament with a view to its definition and limitations."

A brief reference to the American attitude towards this procedure will not be out of place here. More than a hundred years ago the power of the Federal Court to punish contempt of court by scandalising the court by summary process of attachment was abolished by a Congressional Statute.[3] The circumstances which eventuated in this enactment in 1831 are worth recalling. James H. Peck, a judge of the Federal District Court disbarred and consigned to prison an attorney practising in his court for publishing a libel upon him in his capacity as a judge.

[1] *Amrita Bazar Patrika*, Dak edition, 29th June, 1943.
[2] Hansard, 3rd Series, Vol. CCLXXVII, cols. 1612-13, April 6, 1889.
[3] Federal Act (Act of March 2, 1831), Chap. XCIX—An Act declaratory of the law concerning contempts of court. See Sections I and II.

The exercise of the summary power in this case was considered so gross an abuse of the power which the court had assumed following the precedents of English Common law that immeditately thereafter articles of impeachment were presented against Judge Peck who, however, escaped conviction very narrowly ; twenty-one out of fortythree senators pronounced him guilty. But the Congress did not stop there. Soon after Judge Peck's acquittal it rushed through the Federal Law of Contempt which bitted and bridled the Federal Courts in respect of constructive contempt. "The powerful legislative influence generated by Peck's trial did not exhaust itself in Congress. So did the Peck's case stir the country that state after state copied the Federal law."[1]

That the present state of the law and procedure in certain class of contempt cases is extremely unsatisfactory cannot be overemphasized. Under the existing law the discretionary power of the judges to punish offences against their own dignity is seriously open to abuse. It is, therefore, desirable that the law of contempt, especially the law relating to criticism of the conduct of the judges, should be defined in clearer terms and unambiguous language, so that the scope of the judges for the abuse of their power may be reduced to minimum. It may be suggested that only such attack upon the judges should be treated as contempt of court as relates to their conduct in a pending trial and as has a tendency to interfere with the course of justice not in an 'ideal' sense but in a real sense. To obtain redress for a libel unconnected with any suit which is either awaiting trial or under trial a judge should have recourse to the ordinary civil tribunal or prosecute the offender criminally just as anyone else has to do. Secondly, the jurisdiction of the court to proceed summarily in a case of contempt by scandalising the court should be abolished. The court should deal with this class of contempt in an ordinary manner allowing the defendant all the rights and privileges of a trial by jury. From the very nature of the offence it is imperative in the interest of justice that the defendant should be able to put his case to an independent jury without any direct interest in the result. Such a change will not subdue the importance of the court or destroy its authority. Citizens, no less than the judges, have interests in maintaining the dignity of the courts. Justice Sir M. N. Mukherjee of the Calcutta High Court suggested that this species of contempt might be tried under Section 194 of the Criminal Procedure

[1] Power of Congress over procedure in criminal contempts in 'inferior' Federal Courts—a study in Separation of Powers, by Felix Frankfurter and James M. Landis : *Harvard Law Review*, Vol. 37 at p. 1027.

Code.[1] But the procedure under this section promises no real improvement upon the present practice. There is, however, much to be said in favour of the application of summary method in a case of contempt by prejudicing the judges, jurors or witnesses, or by abusing parties to a pending cause. Calumniating a party or publicly discussing matters relating to a cause pending trial does not in any way help the administration of justice; rather it produces the contrary result. Discussion of the merits or demerits of a case which is *subjudice*, or an abuse of the parties or witnesses concerned in a pending suit, is undeniably a hindrance to just or even-handed judgment and as such interference with the course of justice should be punished and prevented by the exercise of summary jurisdiction. Here there is not danger of miscarriage of justice, for the judges have no particular interest in such cases and can well be depended upon to deal out justice without any bias.

[1] *In re Tusharkanti Ghosh and Taritkanti Biswas*, 61 Cal. L. J. 376.

# HOW TO MAKE PARLIAMENTARY REPRESENTATION EFFICIENT

From before the French Revolution to about the close of the First World War was the period during which representative assemblies enjoyed great prestige as an instrument of government. This is not to mean that in all countries popular confidence in these bodies was as unabated on the eve of that war as in the days when Galdstone and Disraeli fought their great duels on the floor of the British House of Commons. But still people held them in regard and believed in their potency as a basic factor of democratic government. It was because of this fact as also because despotic system became discredited by the defeat of the autocratic powers that all countries in Europe outside Russia proper established democratic assemblies after the First World War to formulate their state policy and check and control their national executive. But due to factors to which reference need not be made here, in most of these countries these assemblies became increasingly discredited in the course of a few years. In France on the model of whose constitution the system of government was shaped in most of the succession states in Europe, the popular assembly lost its prestige almost completely and became virtually a laughing stock in the eyes of the French people. Even in England the Mother of Parliaments ceased to be the forum not only for great debates which had once resounded across the world but also for great decisions of Government. The centre of political gravity had already shifted to the Cabinet which made the decisions and the House of Commons merely registered them. In fact between the nether millstone of the rising electorate and the upper millstone of the Cabinet the Parliament became pressed into a gradually weakened and increasingly impotent factor of government. But when all this is said the fact still remains that in a democratic organisation an elected representative chamber has still a function to perform and a duty to discharge. The question is consequently before us whether we are taking every care in the election of the most suitable men to the assembly and taking necessary precaution so as to ensure that they perform their duties without any removable handicap.

This is the question which Mr. J. F. S. Ross has discussed threadbare in a book entitled *Parliamentary Representation*. He has of course confined himself to the study of the British House of Commons and his data are consequently all of them collected from British experience.

But the conclusions he reaches are of universal application and should therefore be scanned and utilised in every country where representative democracy is the system of government. There are people no doubt who will assert that the representative government which is worked in modern democratic countries is founded on principles, basically wrong, and unless the whole system is scrapped and is replaced by a more rational democratic contrivance, there is no hope for democracy to succeed. Unfortunately no such new contrivance as may be acceptable to the people of democratic countries has yet been discovered. Consequently efforts should be concentrated on introducing such reforms as may be practicable in the existing representative machinery. Such questions as what should be the average age of candidates for membership of representative assemblies, what should be their previous training and experience, what financial and other opportunities should be available to them at the time of election and their return to the assembly and how this body should be organised for work have been asked by Mr. Ross and he has attempted to answer them in the light of the facts he has collected in the United Kingdom.

The lines along which he has conducted his research are not new. Dr. Jennings in his work on *Parliament* also made enquiries on similar lines and embodied in that book their results. But Mr. Ross's research is more detailed and it is confined to a limited period extending from 1918 to 1942. It is not necessary to introduce here the different tables of information he has supplied. It will be enough to refer only to some broad facts which he has unearthed so that readers may not only make themselves familiar with the type of members the British House of Commons can boast of but may also be curious about similar facts in respect of members of our assemblies in this country. We find for instance from Mr. Ross's tables that while the average age of the adult population in Britain was about 43, that of the members of Parliament was about 53. In December 1942 actually the average age of the adult population was 44 years 11½ months while the average age of the members of the House of Commons was 58 years 1 month. It has been further calculated that between 1918 and 1935 out of the average membership of 591, those whose age exceeded 66 were 43, and those whose age ranged from above 31 to 61 were 462. If the thirty years between 31 and 61 are regarded as the most effective period of life, about 130 members were in age groups not really effective. Next Mr. Ross gives us some figures about the previous parliamentary experience of the members. Between 1918 and 1935 out of an average membership of 601 there were as many as 175 without any experience, 183 whose ex-

perience ranged from 1 month to five years, 107 with experience from five to ten years, 78 with experience from ten to fifteen years, 29 with experience from fifteen to twenty years. In other words a very large percentage of the members was either without any experience or with only very small experience of parliamentary work.

Educational background of the members of the House of Commons was also a subject of enquiry and in this connection Mr. Ross tells us that between 1918 and 1935 in average forty-two per cent. of the members were University graduates. This percentage would of course depend upon the strength of the Labour Party in the House. The greater the strength of this Party, the lesser would be the percentage. In 1929 when Labour came to office, though not exactly to power, the percentage was 38, in 1931 when there was a debacle of this Party it was 51, and in 1935 when Labour partly recovered its strength, it was 46½. Of the 42 per cent. who were University graduates, Oxford claimed 17½, Cambridge 13 and other Universities 13½. Again it is interesting to remember that of the Oxford-Graduate members 80 per cent. were Conservative, 15 per cent. Liberal, and 5 per cent. Labour. Of the Cambridge-Graduate members the Conservatives claim 74%, Liberal 18% and Labour 8%. In average only 11 per cent. of the University-Graduate members were affiliated to the Labour Party, 20½ per cent. to the Liberal Party and 68½ per cent. to the Conservative Party. School education when analysed yields also interesting information. In average, of 602 members 136 attended only elementary schools and of these 136 as many as 116 belonged to the Labour Party.

In respect of the occupational background of the members it is pointed out that during the period under examination 23% of the average membership were Lawyers, 23% Company Directors and 13% Trade-Union Officials. This percentage, as could be expected, would vary from party to party. While among the Conservatives Lawyers constituted 26½% and Company Directors 31%, among Labourites their percentage was respectively 7 and 0. On the other hand Trade-Union Officials constituted 49½ among the Labourites, 2 per cent. among the Liberals and 0 among the Conservatives. Actually in an average House of 602, Employers and Managers claimed 152, Rank-and-file Workers 125, Professional Workers 272 and Unoccupied (rentiers, landowners, etc.) 53.

The disproportion between the number of votes cast for, and the number of candidates returned by, different parties to the House of Commons is also brought out into relief by the figures cited by the author. The Liberals have particularly suffered as a result of this disproportion

which is caused by the system of representation maintained in the United Kingdom. In 1918 the Conservatives by securing 4,265,000 votes returned 358 members, Liberals by securing 3,015,000 votes returned 165 members and Labour by securing 2,069,000 votes returned 72 members. Actually members returned by them ought to have been 246 ; 174 ; 155 respectively. In 1924, the Conservatives polled 7,600,000 votes, the Liberals 2,980,000 and the Labourites 5,580,000. The candidates they returned were 400 ; and 40 ; 151 respectively. Ideally they ought to have been 278, 109, 204. In 1931, votes polled by the three parties were respectively 12,730,000 ; 2,51,000 ; 7,050,000. The candidates they returned were 460; 68; 65. Ideally they ought to have been 340; 67; 188 respectively. In 1935, votes polled were 10,640,000 ; 2,340,000 ; 9,000,000. The candidates returned were 379; 54; 166 respectively They ought to have been 288, 63, 244. It is significant that the British Government which is so punctilious in India about different population groups receiving their due quota of representation not only in the legislature but also in the local bodies and the services has set its face definitely against the introduction of proportional representation in the United Kingdom. This is largely because of the fact that the present system, though unjust to this or that party, secures a strong executive for the country. This is an advantage which the Government is unwilling to forgo in the interests of what is considered as abstract justice.

Apart from the defects revealed by facts which are enumerated above there is the question of expenditure which a candidate has to undergo at the time of election and which he has to make after return to the House. The law in regard to representation provides for theoretical equality. There is legally no bar to an adult either in respect of his being a voter or in respect of his being a candidate on the ground of sex, social affiliation and economic condition. Tawney has remarked that law " is even generous for it offers opportunities both to those whom the social system permits to seize them and to those whom it does not." Actually this legal opportunity is nullified in 99 out of 100 cases by economic conditions and stringencies of finance. Expenditure in elections is no doubt limited by Act of Parliament. It limits expenditure in a county constituency to 6*d* per voter, to 5*d* in a single-member borough division and to $3\frac{3}{4}d$ per elector in a double-member borough constituency. In addition to this a candidate may spend £75 as remuneration to the election agent and he is allowed also his *bona fide* personal expenses. The maximum permissible expenditure in a county division runs on the basis of this calculation from about £900 to £4,400 with an average of about £1,500 and that in a borough division ranges from

£750 to £2,400 with an average of about £1,200. Actual expenditure may not reach the maximum permitted. In 1935 for instance the actual average expenditure for a county division was £576 and for an average borough division it was £ 515.

Now so far as the Conservative candidates are concerned, they have in many cases not only to find this money themselves but have also to contribute in addition to the general Party fund. In fact those which are regarded as safe seats are usually assigned to the candidates who would not only finance their own elections but in addition contribute handsomely to the Party funds. In other words, as it has been accused, seats are sold to wealthy candidates irrespective of their utility as members of the House. Even when a candidate has not to contribute to Party funds and is even partly helped from such funds, he has to find the remaining portion of the money from his own pocket. This means all Conservative candidates have to be inevitably rich fellows. Several years ago a group of young Conservatives protested publicly that because of this practice of selling safe seats to extremely wealthy candidates and because of the necessity to find a large amount of money for running elections, first rate talent could no longer be harnessed to to the Party. Talent, unless it is very fortunate to have inherited wealth, has to be devoted for years to business or professional activities and only when it is considerably worn out in such occupations, it gets an opportunity to be requisitioned for the House of Commons. But by that time it has not only been worn off a good deal but has lost its old elasticity and adjustability. Men who had made headway in business and the professions find themselves fish out of water in the House when they join it at the fag end of their career.

In the Labour Party of course the candidates have not in most cases to find the money themselves. In fact these candidates have not as a rule the means to finance their elections. At the Party Conference in 1933 were adopted certain rules under which the election expenses are regulated. Even under these rules a large portion of the money required for election has to be found by the trade unions. Consequently the safe labour seats have to be assigned to trade union officials who have by long service won the gratitude of these unions and earned promotion to parliamentary life. But it should be known that in most cases they are not exactly fit for parliamentary work. So in respect of the Labour Party it cannot be said that seats are sold to men whose only qualification is that they are wealthy but none the less it is true that it also has to observe the principle of allowing the man who pays the piper to call for the tune.

It should again be known that expenses are not limited to the election time alone. Even if they were so limited, it would not be easy for poor conservatives or for non-trade unionist labourites to contest an election, particularly when such elections may sometimes be more frequent than the law demands. But post-election expenses are also considerable. A Conservative candidate for instance should be willing to subscribe £500 to £1,000 a year to local Conservative Association in addition to what he has to spend at the time of election. During the period which intervenes between two elections the party machinery has to be maintained and the constituency has to be nursed on behalf of the party and consequently the candidate has to find the wherewithal to this end. In other words a Conservative candidate must be willing to set aside from his income £900 to £2,000 a year, if he is keen on his seat in the House of Commons. A person who can afford to indulge in such expenditure must necessarily be a very wealthy man, one in a thousand. It should be emphasised that besides the expenses referred to above there are other expenses also which an M.P. has to undertake. He has no doubt free first class railway travel between London and his constituency and has the right to use House of Commons stationery. But he has to finance the postage and has also to contribute to local charities.

It should of course be stated here that until recently an M.P. was paid a salary of £600 a year, £500 of which was treated as salary proper and was consequently subject to income-tax. The remaining £100 was a contribution made by the Government towards the expenses which an M.P. had to incur in discharging his responsibilities to his constituency. For a rich member of the House this salary of £600 was a good relief to his purse. But for an M.P. who had no other income to fall back upon, it was too inadequate for his purposes. Mr. Ross calculated (in 1942) that a working-class member whose expenses were comparatively small would require an addition of £350 and a middle-class or a professional-class member an addition of £1,000 a year to their salary of £600. This addition would enable them somehow to make both ends meet. Recently the Parliament has raised the emoluments of its members to £1,000 a year. Of this sum £500 would be treated as salary and would be subject to income tax and the remaining £500 would be treated as Government contribution to the M.P.'s election and other expenses. So far as the working-class members are concerned this addition will put them considerably at ease. But members belonging to other parties, whose expenses are far greater will be still subject to a heavy run on their pockets and on this account

poorer people with affiliations to the Conservative and Liberal Parties will still have no chance of being selected as Party candidates for seats in the House of Commons. The candidates of these parties will have in most cases on this account more wealth than brains. In the Labour Party also it is unlikely that the influence of the trade unions in the selection of candidates will be very much lessened as a result of this reform. The existing dominance may go but the trade unions will still have to contribute a great deal towards election expenses and will therefore still insist on the selection of a large proportion of candidates from among their officials. One important thing to remember in this connection is that while the emoluments have been raised from £600 to £1,000, living expenses have increased at least by 30 per cent.

A number of defects of Parliamentary representation in the United Kingdom has been noted above. In order that these defects may be removed and the House of Commons may be made a more effective instrument of public administration, Mr. Ross has suggested certain changes in the electoral system, in the procedure of the House of Commons and in the choice of candidates for parliamentary seats. He has recommended the abolition of the committees of the whole house and the introduction of the principle of proportional representation on the basis of a large constituency with three to seven members. It does not seem that there is much earnestness in any of the parties for the reforms suggested. In respect of proportional representation there is, as it has been noted already, a good deal of prejudice in all political circles outside the Liberal Party. Further, Mr. Ross tells us much about the qualifications which a member of the House of Commons ought to possess. It is not likely that what he says in this connection will have any immediate effect upon British Parliamentary representation. But his observations are timely and attention should be paid to them in India as well. Uptill now much has been written and much done in respect of the selection of men for the permanent civil services but very little attention has so far been paid to the kind of men returned to the representative assemblies. But it should be known that while everything should be done for the selection of the best available talent for the civil services who carry on the day to day administration and advise the ministers in respect of the formulation of policy, every care should also be taken for harnessing only suitable men to parliamentary work. Without this, representative assemblies will go down further than they have done already as a factor of government.

In this connection Mr. Ross refers to a passage in Laski's Democracy in Crisis published in 1933. It runs : " A legislative assembly is neither a collection of specialists nor a body of statesmen. It is an average sample of ordinary men, deflected now this way, now that, by the drift of public opinion, and organised by its leaders to accept a policy which those leaders regard as desirable." Mr. Ross rightly points out that the picture which this passage presents is a singularly unattractive one. It is because of such ideas entertained of representative assemblies even by men of the training and outlook of Laski that these bodies happen as a rule to consist of listless people who throng the smoking room or the bar while debates are carried on in the House by a handful of interested men. By insisting on " an average sample of ordinary men," we really secure the election of members who in eight cases out of ten cannot even intelligently follow the discussions in which the House may be engaged in a given time. Mr. Ross's observations in this regard are apposite. " So long as we encourage the election of members who come forward out of vanity or to grind their own axe, so long as we allow some people to buy their seats and others to obtain theirs by influence, so long as we accept as normal careerist lawyer who lets his briefs and his fees take the first call on his time and energy and the House only what is left, so long must we expect this kind of thing." The problems that face a legislative assembly touch every body no doubt but their solution cannot be attempted by every body. It is true that all the members will not be expected to have specialised knowledge of all the problems. But when a few who are best informed discuss a subject and offer solutions of the problem, the rest must have sufficient interest and sufficient mental and intellectual equipment to follow the discussions intelligently and find out the flaws in the solutions suggested. This is why the educational background, the past experience, the present occupation and general outlook of the possible candidates should be properly scanned before any party decides to select one for contesting an election. In our country where the selection of a particular man as a candidate by a particular party virtually amounts to his election to the assembly, these suggestions should be carefully borne in mind.*

N. C. R.

* J. F. S. Ross, Parliamentary Representation, 1944 (Eyre and Spottiswoode). Price 10*s*. 6*d*.

# Round the World

**Pandit Malaviya—**

By the death of Pandit Malaviya which took place on the 12th November last, India has lost not only one of the noblest patriots but a constructive educational statesman. Born of a poor but highly cultured Brahmin family which had emigrated to U.P. from Malawa about four hundred years ago, the late Pandit took a deep and devoted interest in the affairs of the Indian National Congress almost from its inception in 1885 and gradually rose high in the counsels of this organisation. In fact so great was his prestige among the members of this political body and so widespread was his reputation for ability and integrity that on more than one occasion he was called upon to preside over its annual deliberations and guide its destiny in troubled years and critical situations. But though great were his political services to the cause of Indian freedom, his name will be better remembered and his place in history will be more secure as the founder of the Benares Hindu University. In building up this great seat of learning he had many collaborators but the conception was his own and without the great appeal of his name and without the unti ring efforts he put forth to popularise the cause of this institution, it would not have seen the light of day. Both as founder and then as Vice-Chancellor he had opportunity of developing this University from a rather humble beginning to its present stature. It is the best monument perpetuating his memory.

**U.N.O. Security Council and India—**

A Reuter message, dated, New York, November 19, tells us that Indian candidature for a seat in the Security Council of the United Nations Organisation has been rejected and the powers which have secured seats on this body are Columbia, Syria and Belgium. This is rather a disheartening news. The Security Council is the pivotal factor of the U.N.O. and to remain out of it amounts to the exclusion of India from the seat of authority. Under Article 23 of the Charter of the United Nations this Council is to consist of 11 members five of whom, *e.g.*, The Republic of China, France, the U.S.S.R., Great Britain and the U.S.A. are permanent. The remaining six seats are to be filled by election by the General Assembly for a period of two years. But in the first election which took place last year, three seats were to be filled for one year. It is those three seats which fell vacant recently and for one of which India was a candidate. It should be remembered in this connection that in Section 1 of Article 23 it is definitely laid down that at the time of election due regard should be paid " to the contribution of Members of the United Nations to the maintenance of international peace and security and to the other purposes of the Organisation, and also to equitable geographical distribution."No

body in India will believe that these purposes would be better served by excluding India in favour of any one the three powers elected to the Security Council. The forces which were at work during the twentyfive years of the existence of the League of Nations in keeping India out of its Council seem to be active still against this country in the matter of election to the Security Council of the new International organisation which has replaced the League.

**Machinery for Commonwealth Consultation—**

Mr. R. G. Casey, former Governor of Bengal, has drawn attention to the question of establishing a central machinery at London for consultation among the representatives of different members of the British Commonwealth. This is an old subject which has been debated off and on but so far without any result. During the continuance of the War there was a suggestion from Australia for creating something like a super-Government including the representatives of all the Dominions so that policies regarding war and diplomacy might be discussed and decided upon by all of them together and no member of the Commonwealth might feel that decisions affecting its interests either directly or indirectly were being taken over its head. But this suggestion was turned down without hesitation by the Dominion Government of Canada. This latter country has always set its face against any suggestion which may be inconsistent with its full independence in all matters of external or internal importance. In the late 19th century when internal autonomy of the Colonies was fully attained but in external affairs they were still dependent upon the British Government, there was a proposal of establishing what was called an Imperial Federation. But development of the Colonies did not take place along this line. On the contrary Colonial Statesmen toiled for and achieved in time virtual independence for their Dominions for external as for internal purposes. It was the War of 1914-18 which helped them in attaining political majority and becoming independent of British control. The resolution adopted in the Imperial Conference of 1926 and the Statute of Westminster passed in 1931 marked the final independence of the Dominions. But this does not mean that ties with the mother country have snapped. In the absence of political control from Westminster, such ties have rather been strengthened. Ties of blood and sentiment are certainly stronger than any that mere political connection might create. Intimacy and affection are, however, no substitute for an organised machinery for consultation. Inspite of all the love which a Dominion might cherish for Britain, it might very well complain when it finds that over its head a decision affecting its interests was taken by the London Government. But the latter might rejoin that as long distance consultation is not always possible, actions have to be taken on occasions without it. So Mr. Casey suggests that a Secretariat consisting of the representatives of Britain and the Dominions should be established at London and this should be not only a general clearing house of ideas but should be available for consultation before any line of action was decided upon. But will Canada agree ?

**U.S. Elections—**

Recent federal elections in the United States have gone rather violently against the Democratic Party. It may almost be said that there has been a landslide. In both the Senate and the House of Representatives the Republicans have secured a very comfortable majority. It should be known that Senators are elected for six years, one-third retiring every two years. In other words only thirtytwo Senators out of ninety-six were to be returned in the recent election. The House of Representatives is, however, elected afresh every two years. Consequently during a presidential term there are two Houses. It is not exactly a new thing in American history that a President in the middle of his term finds himself confronted with a hostile legislature. In the case of Truman there was more than one reason why he should not command the support of the majority of the House and the Senate after this election. It should be recalled that the Democratic Party has been in power in the United States since the first election of Franklin Roosevelt to the Presidency in 1932. Fourteen years are too long a period for any party to remain in office and at the same period continue to enjoy general confidence of the country. It should be remembered again that President Roosevelt put a considerable strain upon the Constitution which people so much venerate. It is true that there is nothing in this document to show that no President should be re-elected except once. But it was a convention almost having the force of law that the maximum period for any person to remain in Presidential office was eight years. Roosevelt was, however, persuaded to stand for the third and the fourth time for this office and his candidature was each time supported by the majority of electors. The international situation in 1940 and the war in 1944 were responsible for his continued occupation of the White House. Possibly, if he survived, his personality might have prevented the present reaction, to some extent at least, against his Party. But it is doubtful if the Democrats even under his leadership could have come back in a majority to the House and the Senate. People might have tolerated him and even gave him support during the crisis but would not have obediently listened to him after his violation of a respected tradition on two occasions.

Then again the New Deal legislations which had been undertaken at his instance during a period of grave economic crisis created a violent revulsion of feeling when the crisis was mitigated and better times were in sight. The war itself brought on a boom period during which the traditional individualism would assert itself. But so long as the war was on hand, the New Deal policy had to be supported though in a modified form. But with its end the reaction against Government interference was in full swing. So the Republicans with the support of right-wing Democrats have found it easy to gain confidence of the country and are likely to dominate the Congress until a new crisis is hastened by their unintelligent exercise of power. The last but not the least contributing factor of Democratic debacle was the muddle which Truman

made in regard to Byrnes-Wallace controversy. First he supported Wallace, then retraced his steps and tried to assume an air of neutrality in the controversy and finally retracted completely and sided with Byrnes. Wallace who had been Secretary of Agriculture, then Vice-President of the United States and finally Secretary of Commerce had to resign and withdraw from the Government. But this withdrawal on his part left behind an odour which was not edifying so far as the Truman Administration was concerned. The public in fact became bewieldered. They even became convinced that Truman whom only an accident had elevated to the highest magistracy of the country was not of presidential timber. He was incapable of giving directions on critical occasions. An election fought under the leadership of such a man could not be successful.

After the elections were over, some one spread the canard that Truman would now leave the Government and place it after his resignation in the hands of a Republican. The procedure to be followed was that contemplated by President Wilson on the eve of the election of 1916. It should be remembered that on that occasion he had decided that if the election went against him and Mr. Hughes, his Republican opponent, was returned, he would not wait till March 1917 but would hand over power at once to Mr. Hughes. He would first of all call for the resignation of the Vice-President and the Secretary of State and when it would be secured he would appoint Mr. Hughes the Secretary of State and then resign himself. As the Secretary of State was next to the Vice-President in succession line, Mr. Hughes would be performing the duties of the President in November, 1916, though according to the arrangement then in vogue he would not have been inaugurated in normal circumstances until the following March. Hughes was, however, defeated and Wilson had to forget what he had contemplated. The question is if there is any parallel between the conditions in which Wilson thought of such action and the conditions in which Truman lost his majority in the Congress. First of all if Wilson was defeated he would have but four months of office before him ; in the case of Truman he has still two years to run. Secondly, 1916 was a very critical year in the history of the world as of the United States. The question was whether the United States would break with Germany and come out on the side of the Allies. In this critical situation it would not be wise for a President who had only four months of office left to take any decision. He could only mark time. But this would be unwise. The better policy would be to let in the President-elect at once and give him the opportunity of formulating his policy without delay. Truman has, however, no crisis to face. It is on the contrary over. It may, of course, be urged that a President without a majority in either chamber of the Congress will be ineffective. But in reply it may be stated that the system of American government makes it inevitable on occasions. Besides, it should be known that a President with a majority in two houses at his beck and call may have great opportunity of leading the nation with vigour but a President without such majority to support him need not also be completely helpless.

**War Academy—**

The Indian army before the war of 1914-18 was officered exclusively by the British. It was during and after that war that a small number of Indians was recruited and trained as officers. The training was, however, given in the Sandhurst Military Academy of Britain. But as there was a demand in India for an increasing number of recruits being trained and as the authorities of British Military Colleges were unwilling to admit a large body of Indians, the Skeen Committee recommended the establishment of the Military Academy at Dehradoon. This institution now fifteen years old has, however, been declared as outmoded. First, it cannot accommodate and train the large number of officers required for the Indian army in the coming years. Second by, it appears now to be the accepted principle that the Military College should be so organised as to train side by side officers for the army, navy and the air force. Dehradoon Institution has, therefore, to give place to a more suitably located and more commodiously organised academy. It is understood that the model for the new institution to be set up in India is not furnished by any British Academy but by the famous West Point Military Academy in the United States. The site selected for the purpose is near Poona and the college which will be known as the Indian National War Academy is expected to accommodate at a time 2,500 cadets. We do not know when the necessary preparations will be complete and the Academy made ready for the reception of cadets. Some do not expect it to be so ready before three years. Possibly this will be too long a period. We would like this institution to be orgainsed on the most up to date basis but subject to this all efforts should be made to bring the Academy into working order as early as possible.

**Civil Court in Bombay—**

A proposal has been mooted in Bombay for the establishment of a Civil Court in that city. As in Calcutta all civil suits except small causes have to be instituted in that city in the original side of the High Court. But litigation here is expensive and complicated. A separate civil court to this end may be helpful to the litigant public. We are told that this proposal is not exactly new. It was first made in 1916, then revived in 1934 and taken up again rather seriously when the first Congress Ministry was in office. But so far nothing has come out of the proposal. This time also objections have been taken to it on the ground that such a civil court " will be derogatory to the dignity of the High Court." We do not see how it will be so derogatory. The High Court would not only continue as an appellate court but might continue to exercise original jurisdiction in those disputes which would involve large sums, say fifty thousand rupees. Besides, the legislators when making law are to consult the interests of the public, not the dignity and power of an institution. To maintain such dignity and power may sometimes be inconsistent with public convenience and interest. Possibly the Calcutta public may like to take a leaf out of the book of Bombay.

**Bhubanmohan Sen—**

We regret to learn that Mr. Bhubanmohan Sen, a distinguished educationist, passed away at the age of sixty-one on the 29th October last. He took his Master's Degree of this University in 1910 and served thereafter till death the cause of education in Bengal and Assam. As a student he had come into direct touch with educationists like Dr. H. C. Mookerjee and the late Dr. Herambachandra Maitra and the spirit he imbibed from them inspired his work throughout his life, which was dedicated to study, research and teaching. He was associated for years with the Cotton College, Gauhati, as Professor and Head of the Department of History. It was not, however, only through the medium of his lectures in the class room that he made his learning available to the people. He contributed off and on to periodicals and newspapers and the papers so contributed in English, Bengali and Assamese helped considerably in clarifying the ideas and thoughts of the public in many tangled matters. May his life be an example to young educationists of this country.

# Reviews and Notices of Books

**What Gandhiji Has Done for India.**—By Ilami Markaz. Published by Y.M.C.A., Lahore. 1946. Rs. 3-4.

The question that is uppermost in all minds today is : What has Gandhiji done for India ? Fortunately for India, and the world, too, Gandhiji is still with us, and likely to be so for a long time to come, if a people's heart-felt prayers mean anything. The work of writing down an inventory of his good deeds is for the future historian, but every day we want to know—not always in a doubting, captious spirit—what has been Mahatmaji's contribution, and to watch our progress in the light of that achievement, to realise it and to go forward.

This book will help us considerably in that way. In a book of collections like the present, the unity of thought and spirit may well be lost to view—specially when individual contributors are not tied down to any particular viewpoint, except what Gandhiji's personality may supply as a link. The articles are all brief and relevant, and the co-operative venture has been, so far as may be gathered from the miscellaneous reading (desultory as is but natural in the case), thoroughly enjoyable and a success. The get-up leaves nothing to be desired, and the publication has been timely.

**Some Political Achievements of the Congress.**—By Sam M. Neksatkhan. 14 pp. Annas Four only.

**Translation into the Roman Script.**—By K. G. Mashruwala. 16 pp. Annas Four only.

**Imperialism in South-East Asia.**—By Prof. D. S. Nag. 48 pp. Re. 1-2.

All the three pamphlets noted above are Hamara Hindustan publications issued from Bombay and exhibit different specimens of nationalist literature that are being placed before the public today. Dr. H. C. Mookerjee has stressed before us the non-political achievements of the Indian National Congress, and M. Naksatkhan stresses the other side—the two pamphlets supplement each other. The Congress is after all a political body and it will eventually stand or fall by its political work. The maturing of political consciousness in all classes of men and throughout all the provinces, the political awakening among Indian women, the permeation of Congress ideas even in the Army, increase of fighting strength in the country, all these are to the credit of the Congress. The creed of non-violence has added to the glory of the national organization of India. The strength of the Congress has been tested in the popular elections, and its moral leanings have already borne fruit in the prevention of class war so far.

Shri Mashruwala is an ardent champion of the Roman Script, but in the pamphlet under notice he simply presents his scheme of transliteration. He

does not favour the use of diacritical markes, nor the introduction of special types, but he makes X an indicator of the softn asal sound, Q of the short and close vowel when it follows any vowel except *a*, F lengthening the vowel sound, etc. His scheme has the virtue of simplicity and may well be given a trial —but the trial must be sufficiently wide, that is, universal, to get a clear indication of its success.

Prof. Nag's booklet is well-written. Holland, England and France have dug their roots deep into the soil of Indonesia, Malaya and Indo-China, and Imperialism lies safely and comfortably ensconced. Dogs may bark, but the caravan goes on. Nutmeg, rubber, coal, iron and maize—they are all piled together behind the imperial bulwark. The recent upheaval in South-East Asia, in spite of all its attendant miseries, has at least served as an eye-opener. With commendable brevity and thoughtfulness and a constructive imagination, Prof. Nag gives a vivid picture of the economic future of these countries and outlines the Congress attitude to the question of permanence of imperialistic powers in these areas. Congress, or for that matter India's, attitude has already been defined in its protest against the misuse of Indian troops.

P. R. SEN.

# Ourselves

## Pandit Madan Mohan Malaviya

At a meeting of the University Syndicate held on the 13th November last the Vice-Chancellor referred to the death of Pandit Madan Mohan Malaviya and paid a respectful and glowing tribute to his memory. Thereafter all members standing, the Syndicate adopted the following resolution: "That the Vice-Chancellor and Syndicate deeply mourn the death of one of the truest and greatest sons of India and offer Pandit Govinda Malaviya and his family and the Benares Hindu University their respectful condolences." After the adoption of the resolution the meeting of the Syndicate was adjourned and the University offices in all the departments were ordered to be closed on the 14th November.

* * * *

## Decimalisation of the Indian Coinage

The question of decimalising the Indian coinage was referred to the University for its opinion by the Department of Industries and Supplies, Government of India. A Committee with the Vice-Chancellor as Chairman was constituted to go into the question and record its views. At a meeting held on the 1st of November this Committee adopted the following resolution: "That the Committee is of opinion that in view of the impending constitutional changes, the question of decimalisation of the Indian Coinage, Weights and Measures which is a question of such great controversy and of vital importance to the people of India, may be postponed for the present and be decided by the new Government after the deliberations of the Constituent Assembly."

* * * *

## Professor Merle Curtie

Professor Merle Curtie of the University of Wisconsin, U.S.A., who has been sent out to India by the Wutumull Foundation to deliver a number of lectures in Indian Universities on American history and life, spoke on two successive days to a large gathering of students and teachers of this

University, on American Federalism and the Problem of American Minorities. On both the occasions the Vice-Chancellor presided.

* * * *

### Professor Lindsay Rogers

Professor Lindsay Rogers of the Columbia University is an educationist of eminence in the United States. He is at present holding the office of Assistant Director of the International Labour Office at Montreal. In this capacity he will be visiting India (in connection with the Asiatic Regional Conference of the I.L.O.) in January, 1947. The University of Calcutta has invited him to deliver two lectures on Public Law and Political Science.

# Official Notificatians, University of Calcutta.

## Orders by the Vice-Chancellor and Syndicate of the University of Calcutta

Notification No. e/397/Affl.

It is notified for general information that under Section 22, read with sub-section (3), Section 21 of the Indian Universities Act of 1904 (VIII of 1904), the Governor has been pleased to order that with effect from the commencement of the session 1946-47, the Rajshahi College, shall be affiliated to the Calcutta University in Islamic History and Culture to the B.A. (Pass) and Honours standards with permission to present candidates for the examination in the subjects from the year 1948 and not earlier.

Senate House,
*The 27th July, 1946*

J. CHAKRAVORTI,
*Registrar.*

Notification No. C/365/Affl.

It is notified for general information that under sub-section (3) of section 21 of the Indian Universities Act, 1904 (VIII of 1904), the Governor has been pleased to order that, with effect from the commencement of the session 1946-47, the Dhanamanjari College, Imphal, (Manipur) shall be affiliated to the Calcutta University in English, Assamese (Vernacular), Bengali (Vernacular), Manipuri (Vernacular), Logic, Sanskrit, History, Mathematics and Arabic to the I.A. standard with permission to present candidates at the examination in these subjects from the year 1948 and not earlier.

J. CHAKRAVORTI,
*Registrar.*

Notification No. C/366/Affl.

It is notified for general information that under sub-section 3 of Section 21 of the Indian Universities Act, 1904 (VIII of 1904), the Governor has been pleased to order that, with effect from the commencement of the session 1946-47, the Mahisadal Raj College, shall be affiliated to the Calcutta University in English, Bengali (Vernacular), Sanskrit, History, Civics, Logic and Mathematics to the I.A. standard with permission to present candidates for the examination in these subjects from the year 1948 and not earlier.

Senate House,
*The 27th July, 1946.*

J. CHAKRAVORTI,
*Registrar.*

Notification No. C/416/Affl.

It is notified for general information that under Section 22, read with Sub-section (3) of Section 21, of the Indian Universities Act, 1904 (VIII of 1904), the Governor has been pleased to order that, with effect from the commencement of the session 1946-47, the Ramananda College, Bishnupur, shall be affiliated to the Calcutta University in Mathematics to the I.A. standard, in English, Bengali (Vernacular), Physics, Chemistry, Mathematics and Biology to the I.Sc. standard and in English, Bengali (Vernacular), Sanskrit History, Mental and Moral Philosophy and Political Economy and Political Philosophy to the B.A. (Pass) standard, with permission to present candidates for the examinations in those subjects from the year 1948 and not earlier.

Senate House,
*The 7th August,* 1946

J. CHAKRAVORTI,
*Registrar.*

10—1600P—X

NOTICE

The undermentioned candidates whose theses were "commended" by the Boards of Honorary Examiners and who were admitted to the examination for the M.S. degree having passed at the written, oral and practical examinations are admitted to the degree of Master of Surgery. The titles of their theses are stated against their names—

1. Amarendranath Sengupta .. A study on the Etiology of Enlarged Prostrate
2. Sarasiranjan Mukhopadhyay .. Studies on paralytic ilens.
3. Bishnupada Chattopadhyay .. (*i*) Inorganic Phosphate and Blood Sugar changes during healing of fractures—clinical and experimental study.
   (*ii*) Histological changes in thyroid and parathyroid during healing of fractures—an experimental study

Senate House,
*The 1st November, 1946*

A. P. DASGUPTA,
*Controller of Examinations (Offg.).*

NOTICE

The undermentioned candidates are admitted to the degree of Doctor of Science. The subjects of the thesis submitted by them and approved by the Boards of Examiners are also stated under their names—

1. Subodhnath Bagchi, M.Sc.
   *Title of the Thesis*—"X-Ray, Thermal and Optical Studies of Hydrogen Clays and their correlation with the Electrochemical Properties of these Systems." (13th September, 1946).
2. Anantakumar Sengupta.
   *Title of the Thesis*—"Studies on Spectra of some heavy diatomic oxide molecules". (13th September, 1946).
3. Ajitkumar Saha.
   *Title of the Thesis*—"Theory of the Screen Cathode β-ray Spectrometer, the Transmission Coefficient of Potential Barriers, etc.". (15th November, 1946).

15th November, 1946

A. P. DASGUPTA,
*Controller of Examinations (Offg.).*

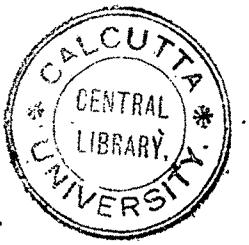
NOTICE

The undermentioned candidate is admitted to the degree of Doctor of Philosophy. The subject of the thesis submitted by him and approved by the Board of Examiners is also stated under his name—

Sudhirkumar Dasgupta.

*Title of the Thesis*—"Kavyalok" (23rd October, 1946).

A. P. DASGUPTA.
*Controller of Examinations (Offg.)*




THE

# CALCUTTA REVIEW

**NOVEMBER, 1946**

## OPIUM POLICY UNDER BRITISH RULE

H. C. MOOKERJEE, M.A., PH.D.

THE opium manufactured by the Opium Department and made available to the public may be divided into four categories. First comes medicinal opium for Europe the whole of which is exported under certificate to the High Commissioner for India in London from whom individuals or concerns engaged in the manufacture of derivatives from it and who have obtained British Home Office permits get it in strictly specified quantities. Next we have medicinal opium supplied to the Indian Medical Department and to charitable medical institutions recognised by Government.

Thirdly, there is the opium meant for export known as Provision opium, the explanation of the term being that, in the early days of the Government monopoly, this drug was exported, mainly to China, "to make provision for the Company's investment." This export trade was so large that in 1879-80, as much as 94.836½ chests each containing 1½ maunds were disposed of. In that year, 4,221 chests were consumed inside India including Burma. Owing to various reasons, this has dwindled to the extent that in 1930-40, only 402 chests of opium were sent out. These figures constitute the best possible proof of the importance of the export trade in the past and its insignificance today from the revenue point of view.

Lastly, there is Excise opium that is to say the opium that is handed over to the Provincial Governments for non-medical use inside India. With the practical disappearance of exports of Indian opium,

the revenue derived from local consumption has almost insensibly grown into an important item in the total excise revenue. While the quantity consumed has gone down materially, it is still large enough having amounted to 3,347 chests in 1939-40.

An attempt has been made in what follows to place certain facts and figures before the reader to prove that the adherence of the British administration to a particular policy explains why it continues to supply this narcotic used mainly for euphoric purposes in India though it has stopped its export for any except medical use thus indirectly agreeing to civilised world opinion about its harmfulness.

## Opium in Pre-British Days

In the territories ruled by the Moghul emperors as well as in other parts of India where opium was produced in pre-British days, there did not exist anything like what we call the excise system. So far as revenue from opium consumed internally was concerned, the right to sell it to the public was granted only after the payment of a local fee. Such shops were to be found in the larger and more important towns only. This system, it may be added, was also followed in other parts of India governed by non-Moghul rulers. It is doubtful whether the revenue from this source, never a large one, reached Delhi in its entirety. From such materials as are available, it appears more than likely that the local officials managed to intercept a large proportion of it.

Patna had been the emporium for opium in the eastern part of India long before the East India Company had assumed its monopoly, large amounts being purchased here, generally by Europeans, for export mainly to China and the Far East. This export trade was more valuable from the revenue point of view than the internal trade. Whatever revenue was obtained from this source came from the State's monopoly of the wholesale purchase and manufacture of the drug which appears to have been framed out. The system possessed the advantage that the trouble of manufacturing and selling the drug through the agency of generally unreliable officials who would not feel any hesitation in turning their master's loss into their gain, was avoided.

At that time, the cultivation of poppy, like that of any other crop, was free. There was nothing to prevent the cultivators from consuming as much as they wanted of the opium produced by them. They

could also sell it in small lots to individuals for their consumption without being interfered with in any way. There cannot be any doubt that the consumption of what we would call illicit opium in both urban and rural areas was quite large in those days.

## Opium Policy of the East India Company 1773-1797

The opium trade which had Patna as in centre was ruined in the course of the struggle between Seraj-ud-Daula and the East India Company. With the restoration of some stability by 1765, there appeared a keen demand for opium by the European Companies trading in India. The supply was short and the high prices paid stimulated poppy cultivation. It is on record that these Companies feeling that they could no longer rely on the Indian middlemen doing business at Patna sent their agents who dealt directly with the cultivators. These people not only quarrelled among themselves but also put up the prices by competing among themselves. In addition, attracted by the immense profits of the export trade, their unscrupulous servants, generally non-Indian, began to trade clandestinely on their own account which, in due time, led to the appearance of large quantities of adulterated opium on the market.

At length in 1773, Warren Hastings, Governor of Bengal, on behalf of the East India Company, assumed the monopoly of all the opium produced in Bengal, Bihar and Orissa. Tempted by the ease with which a revenue from this source could be obtained, the right to the exclusive manufacture of opium on account of the Company was sold at first annually and, later on, by four-year contracts till 1797 when a new system was adopted.

All through this period, no special measures, so far as the present writer is aware, were taken for obtaining a revenue from the opium consumed internally. For nearly a quarter of a century, the old Moghul system of imposing a small fee on shops vending opium was retained. Nor was any well-planned effort made to secure revenue from the opium consumed throughout the rural areas and in the smaller towns. It was only in large centres of population that fees were demanded and realised from those selling opium.

This apparent blindness to its interests may have been due to the recognition of the fact that it would be impossible with the assistance of the machinery then at the command of the East India Company, to obtain sufficient revenue from this branch of the trade to justify the

maintenance of an agency for seeing to the strict observance of such measures as would have to be adopted for the purpose.

So far as the largest part of the opium revenue was concerned, the East India Company was content to depend exclusively on the export trade. The two principal reasons for this were the comparative ease in obtaining it through the system of farming out its monopoly rights and, the large amount thus secured as contrasted with the far smaller, if not negligible, sum realised from shops retailing the drug for internal consumption.

### Opium Consumption 1773-1797.

Under these circumstances, it is not at all surprising that the malpractices which had prevailed in pre-British days should have continued. There can be little doubt that, in the absence of any attempt at the regulation of cultivation of poppy and supervision of the manufacture and distribution of the narcotic by the Company itself, the cultivators generally succeeded in keeping back a portion, however small, of the crude opium produced. Probably part of this was consumed by them and part disposed of. It is also evident that smuggling of the opium obtained in small lots from the poppy cultivators to those areas in old time Bengal, that is, Bengal, Bihar and Orissa, where poppy cultivation was not carried on, must have been common not only because on account of its weight as compared with its volume, opium occupies very little space and can therefore be easily concealed, but also because there was no efficient preventive service.

Further, the East India Company was master of only a small part of India and that in a precarious way; its inhabitants could revolt at any time and it was also open to attacks by enemies, Indian and European. As it had to devote nearly all its attention to safeguarding the territories it had acquired, the Company could hardly find either the time or the means required to properly supervise the control and distribution of opium inside its territories in an efficient manner.

Apart from the illicit consumption of opium by the producers and the contraband trade in it in Bengal, Bihar and Orissa, to which reference has just been made, we have to remember that, as shown elsewhere, poppy was cultivated practically all over India which, in those days, had not yet come under the Company. Here too, its

cultivation was free, here too the cultivators enjoyed perfect freedom in consuming as much of the drug produced as they pleased and, at least part of it could be, and actually was, sent all over India.

From what has appeared above, it is clear that if large amounts of opium had been consumed by Indians in pre-British days, there was but little improvement in the situation in the early days of the East India Company.

## Opium Policy of the Company 1797-1857.

With the prohibition of poppy cultivation in Bengal proper and its restriction to the Bihar part of the old province in 1797; the attention of the East India Company was drawn to the strong demand for the drug, a demand that was being supplied in two ways, clandestine cultivation in out-of-the-way areas and systematic smuggling.

To stop the former, a law prohibiting the cultivation of the poppy without a license was passed so that by the beginning of the 19th century, it was extinguished in all areas controlled by the Company, with the exception of parts of Bihar and Benares where only licenses were issued. The gradual enlargement of the excise staff reduced, but failed to end, smuggling of the drug from non-British territories. It was thus that the revenue drawn from opium consumed internally assumed a new importance which, in time, led to the regulation of the traffic in it.

With successive additions to the territories previously acquired by the East India Company, the same motive of making its monopoly effective enough to shut out non-Government opium from the export and the internal trade, continued to operate so that the cultivation of poppy and the manufacture and distribution of opium were banned in them, the needs of all these places being supplied from the agencies established in Behar and Benares. This went hand in hand with the organisation of more and more improved machinery for the "control" of the production and distribution of the drug.

A gratifying result of the above policy of confining poppy cultivation to certain definite areas so far as British India was concerned, was the removal of the temptation to opium addiction from peasants who had formerly cultivated this crop in nearly every part of India. It also diminished consumption among that class of people, fairly large in number in the past, who had procured their supplies of the drug directly from the poppy growers. It must, however, be added that

during the major part of the period under review, the opium smuggled from the Indian States discounted, probably to a large extent, the effects of the above policy.

If the above policy explains the diminution in the amount of opium consumed in British India, there were, and also are, other equally important factors, the influence of which cannot be overlooked.

The first step taken was the Bengal (Opium) Regulation of 1813 laying down the principle of maximum revenue with minimum consumption. After that, other measure were taken from time to time by the Agents of the Company the one thing common to all being the limitation of the consumption to the lowest possible amount at the same time raising as high a revenue from this source as possible. In pursuance of this policy, the retail price of the drug was gradually increased and more and more efficient supervision of its internal distribution ensured so as to make its illicit supply difficult.

This policy accounts for variations in the retail price of opium in different parts of India both before and after the Montagu-Chelmsford Reforms when the control of the internal distribution of opium came to be the responsibility of Indian Ministers. Where the entry of illicit opium is difficult, the price is higher than where the process is easy—a principle applicable both to the opium manufactured by the India Government as well as to that produced in the Indian States.

## Opium Consumption 1797-1857.

Those who have worked in his particular field are aware that, from the very beginning of the last century till India passed under the Crown, whenever Parliament called for information about the opium trade, the Company had to either explain or defend its exports to China and that, during a period of nearly sixty years, it was on two occasions only that, it supplied information in regard to its export to the Straits Settlements and other parts of the Far East. The consequence has been that while official information about the quantity of opium exported specially to China is available in the Parliamentary Papers presented to one or other of the House of Parliament, there is lack of officially sponsored information in regard to the quantity of opium consumed internally during this long period. If any reliance can be placed on such stray references to this matter as occur rather lately in old time historical narratives, in the memoirs

of officials whose names have been long forgotten, this quantity never exceeded 1,000 chests of 1½ maunds each.

This seems a serious under-statement, for there is irrefutable proof of the wide extent of opium addiction in all parts of India during this period and it does not seem at all likely that every enlargement in the Company's territories saw the giving up of the use of opium by the addicts inhabiting them. The probabilities are that such people, not yet accustomed to the control of distribution of the drug or to the dearness of the narcotic sold through licensed vendors, relied on sources which, had formerly supplied them and which, under the new dispensation, had taken to contraband trade.

But though we cannot make even something like a guess as regards the total amount of opium, licit and illicit, consumed in British India during this period, it would be difficult for the objective student to deny that just as the consumption of opium was lower in the early days of the East India Company than in pre-British days, in just the same way there was smaller consumption in the period under review as also that this took place in successive stages determined by the concentration of cultivation and the tightening up of the agency for distribution.

As the East India Company thought it inexpedient to interfere with the internal affairs of what have been called the Protected States, there was utter absence of any check on the cultivation of poppy, the manufacture and distribution of opium as well as its consumption by their people. As their total area is nearly 600,000 square miles and includes some of the most suitable land for the cultivation of the poppy and, moreover, as opium addiction has been common in them from very early days, there can be little doubt that the habitual use of the narcotic for purely euphoric purpose was very large not only among the poppy-growers and among the people there who obtained their supplies at comparatively cheap rates from the cultivators but also that large amounts of the opium produced in them were smuggled into British India part of which was consumed internally and part exported.

The magnitude of the opium problem so far as these States are concerned may be easily inferred from the fact that long after India had passed under the Crown and after practically all of them had agreed to come into line with the policy of restriction of cultivation and control of distribution of the drug of the British administration

in India, Lord Irwin who had summoned a conference of these opium producing States in May, 1927 in the course of his introductory speech was compelled to observe :

"No one, I believe, can deny that large quantities of opium are smuggled out of Indian States.

"The high rate of consumption in the States is bound to arouse increasingly unfavourable comment in India, and outside India, and bring discredit on both the States and the Government of India."

As regards the smuggling of Indian States opium, we find repeated mention in the *Excise Reports* issued by the Burma Government of seizures of Malwa opium which clearly proves the large scale of this contraband traffic. So far as the immoderate consumption of opium inside these States is concerned, we find that in one of them, Jaisalmir, it averaged in 1928, 1,000 seers per 10,000 population as against 6 seers per 10,000, the League of Nations standard.

The above information was taken by Mr. H. G. Alexander from a report issued by the authorities of this State and will be found on page 47 of his *Narcotics in India and South Asia*. It is admitted that though reports are issued by the other opium-producing Indian States, they have not been made available to the present writer though he has made more than one attempt to secure them through the book trade and he therefore does not feel justified in pronouncing any opinion about them. There is, however, a general, which so far as he is aware is a correct, impression that very large quantities of opium were and are consumed not only in nearly all the Rajputana and Central India but also in the Punjab and Simla Hills States.

## Reasons for the Company's Attitude.

It appears from a memorandum on the historical aspects of the opium question in China by Sir James Lyall, Kt., G. C. I. E., K. C. S. I., who served India long with distinction and who was also a member of the Royal Commission on Opium, that when Warren Hastings and a majority of his Council took over the opium monopoly, their professed objects were first, to raise a revenue for the East India Company's territorial Government, secondly, to prevent the agents of the French and the Dutch Companies from dealing directly with the poppy cultivators in the interior, thirdly, to keep up

the quality of the drug by stopping its adulteration by cultivators and private traders which had caused a falling off in opium exports and lastly, and a long way behind, "to have power to regulate or restrict internal consumption if necessary."

That the first of these objects was secured by the export trade the proceeds from which at one time formed the second most important item of revenue in India, that non-British European Companies were shut out from establishing trade relations with the poppy cultivators which, it had been apprehended, might be exploited for political ends, and that the State monopoly ensured uniformity of standard of both Provision and Excise opium are indisputable facts. But it does not appear that any special steps were taken to restrict internal consumption probably because this was not felt to be necessary.

And there were very good reasons for the apathetic attitude of both the Directors as well as of the agents of the Company. It had its critics, if not its enemies, influential men whose requests for various kinds of favours had been refused by its authorities, individual businessmen and commercial organisations envious of its unique position in the British economic and political world. These wanted an excuse to attack it and that was supplied by its opium trade.

Missionaries who had established their stations in different parts of China had done so with the backing of influential home boards behind them. They found that the Chinese were aware that the export of Indian opium to their country in which the British administration in India was vitally interested had the indirect support of the British Government. They refused to give the missionaries a hearing and told them that they should start by converting their own countrymen before preaching Christianity in non-Christian lands. The condemnation of the export trade by these obviously honest and sincere Christians, by their home organisations and, lastly, by various Temperance organisations made things very uncomfortable for the Company.

One reason for this outcry against the China trade undoubtedly was the wide prevalence of opium addiction in that country as contrasted with the far smaller numbers habitually taking the drug in India. It may be that the missionaries in India who had noted the fact did not feel called upon to make such vigorous protests against the opium evil in India as their colleagues in China. Further, they were small in number and being scattered over a very large area in which

communication was far from easy, had failed to develop an all-India opinion only united public expression of which would carry weight in their home-land where attention had already been attracted to the far more serious Chinese problem.

This concentration of criticism on the export trade to China was to be expected. For, it was this country which absorbed not less than twelve times the quantity consumed internally. It would also be quite easy to prove that the opium exported to other parts of the Far East was, more often than not, two to two and a half and, sometimes, even three times, the amounts used in India and Burma.

These seem to be the reasons way the East India Company, the Home as well as the Indian authorities of which were engaged either in the conquest of fresh territories, in consolidating their acquisitions or in setting up new or overhauling old machinery for the efficient administration of the areas controlled by them, shelved their plans, if they had any, for reducing the internal consumption of the narcotic. But certain steps, to some of which reference has been made previously, its agents took and these were primarily taken in the interests of the export trade but they had their natural repercussions on the internal consumption of the drug.

*(To be continued.)*

# SOCIOLOGICAL INTERPRETATION OF INDIAN MUTINY[1]

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## I. INTRODUCTION.

A great event occurred in the annals of Indian History in 1857. While the English Historians have dubbed it as a "Sepoy Mutiny," the Indian writers have glorified it as a "War of Independence."[2] If the former characterisation is the result of Imperial arrogance, the latter is the product of blind nationalism. One characterisation is as wrong as the other.

The former characterisation is wrong because it fails to explain how it was that "in the course of ten days English administration in Oudh vanished like a dream, and not left a wrack behind;"[3] why it was that at "several places the populace rose before the sepoys at those stations mutinied."[4] If it was a purely military insurrection; why it was deemed just "to punish the country people and citizens by fine and hanging for complicity in acts with which they . . . had nothing to do;"[5] and, why it was that in Oudh the rebels could march without commissariat, leave their luggage without guard and were sure of the enemy movements without any system of telephone or telegraph.[6]

It will be equally wrong to say that the army and the feudal lords had mutinied on account of any sense of patriotism, for, there are several examples before us, both in pre- and post-mutiny periods, when these two classes of our people were used against many of the native chiefs and our people. They always unquestioningly obeyed the orders of their commanders who were all British.

[1] I use the word mutiny because of the currency it has gained. I do not characterise this event as mutiny. S.S.

[2] V. D. Savarkar : India's War of Independence.

[3] G. W. Forrest : A History of Indian Mutiny (1904), V. I., 217; Duff : History of the Indian Mutiny, V. III, 487.

[4] Vincent Smith : Oxford History of India, 722. Edward Thompson : The Other Side of the Medal, 107.

[5] Russell : Diary, V. II, 253.

[6] Charles Ball : History of the Indian Mutiny, V. II, 572.

In order, therefore, to know the real nature and to estimate the real effects of the Mutiny on our succeeding history—whether social, economic or political, it is very essential that we should investigate into its real causes, follow its whole development through blood and toil, and study the role of various clauses in the titanic conflict Otherwise, our characterisat on and evaluation of the Indian Mutiny will always suffer from personal prejudices and preferences.

## II. The Causes and Participants

The stories of the fabulous profits being made by the Portugese, Dutch and the French trading companies tempted the British merchants to form a trading company. In 1600 the East India Company obtained a charter from Queen Elizabeth to trade with India and the Spices Islands. By the middle of the 18th century the East India Company had ousted the rest of the competitors from the Indian market.

Trade with India in the beginning was a matter of buying goods from the Indian handicraftsmen and their ignorance of the value of their goods, rendered them easy victims of the unscrupulous foreign traders who paid them a trifle but made huge profits. The dividends of the East India Company used to vary between 106 to 250 per cent per annum,[7] apart from the pickings of its individual agents and servants.[8]

The inevitable consequence of the accumulation of wealth of plunder in England was that it became, along with similar other accumulations, the basis of the primary accumulation of capital for the development of capitalist enterprize in England. Marx remarks that "chartered companies were powerful instruments in promoting the concentration of capital . . . the treasuries obtained outside Europe by direct looting, enslavement and murder flowed to the Motherland in streams and were there turned into capital."[9] Brook Adam while agreeing with Marx cynically remarks: "Had Watt lived fifty years earlier, he and his inventions must have perished together" because "in themselves inventions are passive," and need

[7] Joan Besuchamp : British Imperialism in India (1935), 17; R. Palme Dutt : Modern India (1946), 31.
[8] James H. Holzman : The Nobobs in England (1926).
[9] Karl Marx : Capital, V.I., 835-36.

"a sufficient store of force (of money) to be accumulated to set them working."[10]

The Industrial Revolution in England completely transformed the character of British relations with India. Previously the job of the East India Company was "not to exchange as far as possible the manufacture goods of England for the products of India but to carry the manufactures and commodities of India to Europe".[11] Now, on the other hand, the expansion of English manufacture overwhelmed and destroyed the primitive Indian manufacture, and India became a great source of raw material and a vast market for British capitalists.

The conditions of the uprooted citizens became so miserable that the Governor General reported to the Court of Directors in 1834-35 that "the misery (of the cotton weavers) hardly finds a parallel in the history of the commerce. The bones of the cotton weavers are bleaching the plains of India."[12] The handicraftsmen sullenly bided their time for the recovery of what they had lost, in some new revolutionary epoch.

The great transformation in Indo-British trade relations had very severe repercussions on the Indian social structure. The uprooted artisans fell back upon land as there was no possibility of replacement of handicraft Industry by machine Industry in the orbit of Imperial relations. But the land could not sustain further pressure, owing to the primitive methods of its exploitation combined with the heavy burden imposed by the new land tenure system.[13]

The wealth which the Company derived from the exploitation of Bengal, Behar and Orissa tempted it to expand its territory. The Company's Army fought twenty wars between the battle of Plassey and the Indian Mutiny. In one hundred years Mysore, Maharashtra Karnatak, Tanjore, Oudh, Bandhalkhand, Rohilkhand, Hariana-prant and the Punjab (including the present N.W.F.P.) were added to the Company's domains. All the former states from Kashmir down to Hydrabad Deccan came under the Company's protectorate.

The annexation policies of successive Governor Generals culminated in the much-resented policy of Lord Dalhousie who abrogated

[10] Brook Adam : The Laws of Civilization and Decay, 260.
[11] Queen Elizabeth's Charter of the East India Company.—Quoted Wadia and Merchant : Our Economic problem, 379.
[12] *Ibid.*
[13] To be dealt with in the later part of the article. S.S.

the ancient Indian right of adoption of heirs. He revived and applied to the last extremity the feudal notion of escheat. He annexed under this pretext the States, of Satara Nagpur, Jhansi and Sambhalpur, between 1848-54. He refused to grant pensions or to recognise the titles of the adopted heirs of the King of Tanjore, Nawab of Karnatak, and of the last Peshwa. He added the territories of Oudh to that of the Company in order to bestow upon them the "benefits" of British rule and to root out corruption, mis-government and anarchy. It was also decided that Bahadur Shah's heirs were to vacate the Fort and the Palace after his death. Thus the phantom of the Moghul Emperor was to be buried along with the rags of royalty which he wore.

These annexations and conquests brought the new rulers face to face with the problem of collecting land revenue. After a series of trials and failures, Lord Cornwallis decided to have Permanent Settlement in Bengal, Behar and Orissa in 1793 which a little later was extended to some parts of North-West Province (Modern U.P.). He insisted upon regarding the Zamindars (taxfarmers of Moghul times) not as a mere agents of the State (which they had always been) but as land-lords in the English sense. His aim was to secure the revenues of the Company.[14] But it actually "created a vast body of landed proprietors deeply interested in the continuance of the British Dominion.[15] Under the new system the collective responsibility of the village communes was undermined and British conception of private property, with power to sell and alienate was established in the rural economy of India to which it was alien.[16] The rate of revenue was high (10/11ths); the estates were often sold in default of payment of land revenue.[17] "The system of sales and attachments has in the course of few years reduced most of the great Zamindars in Bengal to

14 "I am...convinced that failing the claims of Zamindars, it would be necessary for the public good to grant a right of property in soil to them in order to secure ..... your (Company's) revenues." Cornwallis correspondence—Lord Cornwallis to the Court of Directors, 533.

15 Lord William Bentinck to the Court of Directors—quoted in Ashoka Mehta's The Great Rebellion (1946), 65.

16 Lord Metcalfe: Selections from the Papers of Lord Metcalfe, 253.
Sir John Strachey: India (4th Ed. 1911), 365, 427.
R. Mukherjee: Land Problems of India, 16.
Merx-Engels Correspondence; Engels to Marx, 81.

17 Strachey: 458.

distress and beggary, and produced a greater change in the landed property of Bengal than perhaps ever happened in the same period of time in any age or country by the mere effect of internal regulation"[18]. The original Zamindars soon melted away and were replaced by mercantile speculators " who now hold all the land in Bengal with the exception of the estates returned under the direct management of the Government."[19] This new class of merchant-landlords had no interest either in the soil or in the tenant. Their only interest centered round the collectien of rent. Rent, therefore, assumed enormous proportion. Dr. Francis Buchanan who carried on a "Statistical Survey" of India on behalf of the Company between 1800-14 records; "The natives allege that.....they did not actually pay (to the Moghul officers) one-half of what they do now."[20]

Hence " The English destroyed the old Indian feudal system, expropriated the old landlords, but far from liberating the pessantry from feundalism, as agrarian revolution carried through in capitalist countries have liberated them, or at worse turned them into wage labourers working on landlords' estates, they bound the Indian peasantry to an even worse serfdom, at the same time crushing down a great number of the old landlords to the same poeition."[21]

Lord Dalhousie annexed Oudh. Numerous depéndents of the late Court and the traders who had ministered to its luxuries were suddenly thrown out of employment.[22] They rightly accused the British as the cause of their downfall and became its bitter enemies.

The Inam Commission immediately appointed to enquire into the titles of the landlords of Oudh, confiscated more than 20,000 estates[23] in the course of five years preceding the Mutiny.[24] "Men who had been proprietors of vast tracts of country as far as eye could reach

[18] Report of the Collector of Midnapore in 1802 : Quoted—R. Palme Dutt : India To-day (Indian Ed. 1941). Part III, 9-10.

[19] Marx. Quoted Ralph Fox : Colonial Policy of British Imperialism (1933), 18.

[20] Quoted—R. Palme Dutt : India To-day, Part III, 3; Also see Bishop Haber's Memoirs and Correspondence (1830), V. II, 413.

[21] Ralph Fox: 19. [22] Holmes : 71.

[23] According to the Memorial of G. B. Seton-Carr "The titles of no less than 55,000 estates... ..were called for by the Commission, and during the first five years three-fifths of them were confiscated." Quoted John Willium Kaye's "A History of the Sepoy War in India", V. I, 177; also see page 173 for the Minutes of Mr. Robertson, Lieutenant Governor, N.W.P.

[24] Holmes : 41.

shrivelled into tenants of mud huts and possessors only of a few cooking pots[25], "unable to work, ashamed to beg, condemned to penury."[26] The great result of the Settlement was that the remnants of feudalism were swept away and a new race of peasant proprietors grew up. The Talukdars who had lost their baronial rights being in the first throes of humiliation swelled the numbers of the dissatisfied who traced their downfall to the operations of the British rule.[27]

The advantages, if any, which occurred to the cultivators of Oudh due to the working of Inam Commission were more than nullified by the disbandment of sixty thousand men of the army of the last King of Oudh. Every home in Oudh was affected by this new calamity of forced unemployment[28]. The over-assessment of land, in order to show the profitableness of this annexation also worked in the same direction. " Fourteen thousand petitions had emanated between the annexation of Oudh and Mutiny from the 75,000 sepoys belonging to the province against the hardships of revenue system introduced by the British[29].

25,000 Brahmin sepoys were doubly hit when lands attached to charitable institutions were confiscated.[30] The members of the priestly class whose comfortable incomes were thus snatched away "turned their power which they exercised over the minds of others to fateful account of fomenting popular discontent, and instilling into the minds of the people the poison of religious fear.[31]

"Whilst the resumption of rent-free tenures grievously affected the old Mussalman families, roused their resentment...and made them ripe for sedition."[32] The new educational system and the all-pervading Englishism made the Muslim intelligentsia shrink into insignificance.

25 Kaye : V.I. 157.

26 G. B. Seton-Carr's Memorial quoted above.

27 Director Tucker's Statement : Kaye, V.I. 165; also see Lord Ellenborough's letter to Lord Canning indicting the Oudh Settlement : Quoted—R. C. Dutt : The Economic History of India in the Victorian Age, 266.

28 Asoka Mehta : 13 foot-note. See also The Punjab and Delhi in 1857 by the Rev. J. Cave-Browne, V. I. 26, 27 and 29.

29 *Ibid*, 66; Forrests; V.I. 162; Holmes : 192.

30 Kaye : V.I, App. I; also foot-notes on 171-72.

31 Kaye: V.I, 180.

32 Kaye : V. I, 197 ; see also foot-note on this page for Mr. Dampier's statement who was Superintendent of Police in the Lower Provinces.

When the Indian people were suffering intensely—economically, politically and socially—a long drawn out depression (1825-54) marked by a decline of price level overwhelmed them.[33] The conditions of the Ryot were still further aggravated when in 1850 the production of silver fell short of the world demand for it. This was because of two reasons : first, Indian currency had been placed on an exclusively silver basis by an Act of 1835 ; and second, India was still at the transitional stage from barter to money economy.[34]

At this critical period the belief in the "invincibility" of the British was shattered by the reverses which they suffered in the First Afghan War, the Crimean Wars and the wars against the Sikhs (1845-49). Indeed they won all these wars but the psychological make-up of the Indians got completely revolutionised in regard to their estimate of their foreign conquerors.[35] The British no more seemed invincible ; the Indian people no longer feared them.

At this fateful time when the economic condition of the Indian people were at their lowest ebb due to centuries of colonial trade, plunder, despotic administration and a long drawn out depression, and when luck seemed to have forsaken their alien masters, the Sepoys refused to use the newly introduced greased cartridges. This refusal worked like a match stick in a petrol tank. The accumulative and suppressed hatred since Plassy most violently burst out. The discontented Rajas and Ranis, Zamindars and tenants, artisans and workers, Muslim intelligentsia and the priestly castes, seized the opportunity to redress their grievances. A powerful combination of these divergent elements was spontaneously formed and the British were faced with a revolting people for the first time since their arrival in India.

## III. Its Extent

The revolt spread like a wild fire. The administration in Oudh "vanished like a dream". "The Central India was gone".[36] In Rohilkhand not only the Sepoys were in munity but the whole country was in rebellion.[37] Nearly all the Bandhelkhand was up in arms

[33] Professor Thomas : Economic History Review : 1933.

[34] Asoka Mehta : 17.

[35] A. L. Morton : A people's History of England (1945), 45. I regard these reverses of as great an importance as the defeat of Russia at the hands of Japanese in 1905. S.S.

[36] Lord Canning to the Court of Directors.

[37] Holmes : 137 ; Kaye : V. II, 411-12.

against the British.[38] The whole Doab was in the throes of a revolution.[39] In Cawnpore Nana Sahib led [40] the mutineers and in Jhansi Lakshmi Bai raised the banner of revolt. The influence of Wahabis at Patna and of the Brahmins at Benares made these two cities fanatically formidable.[41] The dearness of provisions, which was always attributed to the agencies of the British, gave a fillip to the mutineers of Allahabad.[42] In Bengal Permanent Settlement collapsed like a house of cards.[43] Sind, Rajputana, Bombay, Madras and the Punjab (including the present N. W. F. P.), however, remained neutral [44] in the beginning but helped the foreign rulers to crush the Mutiny in its later days.

Wherever the troops and (or) the people rose, the treasury was plundered. The prison gates were broken open. Record offices were burnt down and other offices were condemned to the same destruction. Trading community was compelled to contribute to the needs of the mutineers in money or in kind ; grain and flour were carried off from Banias' shops.[45] "Dispossessed landowners, clutching at the opportunity for which they had long awaited, gathered their old tenants together, hunted out the purse-proud upstarts who had bought up their estates and triumphantly established themselves in their ancestral homes. Insolent debtors mobbed and slaughtered . . . the Banias, whose extortions they would have punished long before, but for the dread of the strong arm of the law."[46]

After doing these "jobs", the Sepoys ran to Delhi, the age-old capital of India. They conquered it and proclaimed Bahadur Shah as the Emperor of India who though weak and aged, still enjoyed the prestige of a great name. While the conquest of Delhi imparted a political and national significance to the movement which otherwise might have been regarded a little more than local outburst, the decision

[38] Kaye : V. II, 411. [39] Kaye : V. II, 411.

[40] Tantia Topi in his evidence before the Court said that the Nana acted under compulsion. He was a prisoner in the hands of the mutineers. See Forrest ; V. I, 420 ; Kaye : V. II, 310.

[41] Holmes : 183 and 209.

[42] Kaye : V. II, 244.

[43] Ralph Fox : 27.

[44] The causes will be dealt with in the later part of the article. S.S.

[45] Holmes : 240, 352 ;
Cooper : Crisis in the Punjab (1858), 208 and 212.

[46] Holmes : 142 ; also see Kaye : V. II, 234-35 for Mr. Tucker's statement.

to restore the authority of the Moghul aroused the old rivalry between Moghul and Marhatta feudal systems and the fears of the Rajputs and the Sikhs. It was on account of this rivalry that Nana Sahib, the adopted son of the last Peshwa, refused to go to Delhi. He did not want "to be overshadowed by the Moghul Court" and in consequence to loose his individual power and influence among a host of other princes.[47]

The Rajput States did not join the struggle. They indeed held a key position. Lord Canning confessed in a Despatch to the Court of Directors: "If Scindhia joins the Mutiny I shall have to pack off tomorrow."[48] These States feared that the triumph of mutineers would mean the revival of loot, plunder and destruction of both Moghul and Marhatta feudal systems. The Rajput aristocracy also feared the loss of "freedom" granted to them by George Lawrence.[49] They therefore could not but help the power which had rescued them in the past from the clutches of the Moghuls and the Marhattas.

The Nizam whose ancestor with the decline of the Moghul Empire had "won" for himself the position of an "independent" sovereign did not join the mutineers for obvious reasons.[50]

Lord Canning rightly remarked: "The States acted as the breakwaters to the storm which would have otherwise swept over us in one great wave."[51]

The mutineers might have expected active support from the Punjab where the British Dominion was only a decade old and could hardly claim any loyalty from the people. But the Sikh Sirdars, one and all, as also the masses failed to side with the popular revolt. The causes were many and varied. They feared that restoration of the old Mughal aristocracy wood mean their own subversion and would revive religious persecution [52] and economic exploitation. Moreover, the memories of the tyranical treatment meted out to them by the Khalsa Army [53] had thrown them into the lap of Sir Henry Lawrence, the Chief Commissioner of the Punjab whose weakness for the Sikh Sirdars

[47] Forrest : V. I, 420 ; Holmes : 228.

[48] Asoka Mehta.

[49] Holmes : 395.

[50] Holmes : 500.

[51] P. E. Roberts : India : V. II, 388.

[52] Morton : 452.

[53] Holmes : 33, 311 ; Kaye : V. I : 59-61 ; Forrest : V. I, 172 ; Ramsay Muri : he making of the British India : 333-34; 344-46.

indeed cost him the Chief Commissionership.[54] Even the dethroned Sikh feudal barons, the rebels of the Sikh Wars, came forward to help the British at the hour of ascendency in the hope to regain their former positions and privileges.[55]

In spite of the Sepoy Mutinies at Peshawar, Noshera, Hoti Mardan Jehlum, Sialkot, Amritsar, Jullundhur, Ludhiana and Phillaur, there was not a single popular uprising in the Punjab in sympathy with the mutineers.[56]. The Punjab peasantry "remained on the whole loyal."[57] The British had not meddled with the land tenure system of the Province due to the militancy of its people and, what is politically and strategically more important, the proximity to the frontier.[58] They had rather, assessed the land low "leaving fair and liberal margin to the occupiers of the soil...."[59] They had also suppressed chaos and anarchy which had followed in the wake of Ranjit Singh's death and thus gave the Ryot stability and peace so essential for his prosperity.[60] Moreover, the construction of the new roads, canals, and bridges [61] and a succession of abundant harvests had made the people "too happy and prosperous" to run the risk of an uncertain future.[62] This loyalty, however, was passive in the early days of the Mutiny.[63] They gave their active support to the British after the fall of Delhi in September, 1857.[64]

## IV. The Role of Classes

With the initial success of the mutineers came the decomposition and disintegration of the mighty anti-British Combine. The anti-

[54] Holmes : 33, 311 ; Kaye : V. I, 59-61 ; Forrest : V. I, 172.

[55] Cooper : 151.

[56] Cooper : The Crisis in the Punjab (1858).

[57] Cooper : 131.

[58] Joan Beauchamp : 34.

[59] John Lawrence to Nicholson : Life of Lord Lawrence by Bosworth Smith (1885) : V. I, 341.

[60] J. Cave-Browne : The Punjab and Delhi in 1857, V. II, 127.

[61] Holmes : 33, 331 ; Kaye : V. II, 421, 436.

[62] Cooper : 27.

[63] R. C. Dutt : The Economic History of India in the Victorian age, 90.

[64] It is absolutely wrong to say that only the Sikhs of the Punjab helped the British in the days of the Mutiny. The villagers of all communities helped the English authorities to capture the mutineers at various places. The land revenue was paid regularly and almost to the last pie. (Holmes records that income from the excise taxes positively increased. See page 336). J. Cave-Browne : V. II, 281-82.

British hatred had brought them together but the different concepts of "free" India threw them apart. The feudal barons who had fomented and joined the struggle to regain their "absolute rule in the Zamindari"[65] were shocked to find the control of the movement gradually slipping out of their hands. On several occasions Bahadur Shah was insulted by the soldiery. He enjoyed absolutely no power, whether executive, legislative, judicial or military.[66] The real power rested with the council of soldiers, the soldiers who elected their own officers.[67] Bakht Khan, an artillery Subedar, and Mirza Moghul, Bahadur Shah's son, were rival commanders of the forces. Their quarrels were immitated by their subordinates.[68] Stricken by these "horrible" sights and the "insolent" behaviour of the soldiers, Bahadur Shah decided to relinquish the sovereign title and to go to Mecca to spend his remaining life "in service acceptable to God."[69] His wife, Zeenat Mahal, an age old foe of the British, feverishly exerted herself to make up with the British[70] when her dreams of becoming the Queen-mother were rudely trampled under foot by the "headstrong soldiery". "The Shahzadas also began to feel their condition very perilous and tried to open negotiations."[71]

Similar was the story in Oudh. "The administration was vested in a minister and Council of State. The Council was formed by the later King's principal servants, the chiefs and the Talukdars and elected representatives of the Sepoys. In the new army (of the mutineers), the Sepoys elected their own officers, and the officers chose their own Generals."[72] The landlords were terrified at the growth of the "democratic" spirit among the soldiers, became suspicious of the results of the revolt, and faltered in the midst of the struggle. This was the most serious breach in the Camp of the mutineers. A house divided against itself were sure to fall.

The break-up of the anti-British Combine is clearly shown by the ignoble behaviour of the Talukdars of Oudh who, severely dealt

[65] A proclamation issued by a Moghul Prince stating the aims of the mutineers. Quoted in full in Asoka Mehta's The great Rebellion, 26-31.

[66] Cooper : 207 ; Holmes : 352-54.

[67] George Campbell : Memoirs of my Indian Career, V. II, 356 ; Cooper : 207.

[68] Holmes : 352-54 ; Cooper : 208 ; Kaye : V. II, 594. See a letter from General Wilson to Calvin.

[69] Holmes : 353-54.

[70] Cooper : 210.

[71] J. Cave-Browne : V. II, 140.

[72] J. Talboys Wheeler : India under British Rule, 265.

with by the British system of administration, had been circulating random rumours against the British and fomenting anti-British hatred. They had, with the help of their retinues and Ryots, looted, murdered and "packed-off" the purse-proud upstarts and the auction purchasers, and re-established themselves in their old ancestral homes and lands.[73] But this was all in the first flush of Indian Mutiny. As time went on the idea of "freedom" began to concretise itself, there was a change in the attitude of the Talukdars towards the Mutineers. They began to keep "discreet neutrality."[74] "They sent to the rebel camps only such cartridges as were demanded, and personally remained passive."[75] A little later they even "rose up to aid us (the British) when the star of our fortune again began to ascend."[76] The reason was obvious. The Talukdars felt their class interest were in danger. They had fomented and joined the struggle to gain absolute feudal rights but were frightened to see the Ryot striving for absolute rights on their lands which meant the extinction of feudal barons as a class. They began to fear victory in the Mutiny almost more than defeat as likelier to bring "revolution." A contemporary noted that not a few of the Rajas "were wise enough to see that a servile war, an uprising of the lower classes against the higher classes would not answer their purpose."[77] "There is only one instance of . . . treachery on the part of petty Zamindars in Oudh which we come across."[78] As early as September, 1857 General Outram wrote to the Governor General that "there is a large and influential class in Oudh . . . among the most powerful, and most of the middle classes of chiefs and Zamindars who really desire the establishment of our rule."[79] While, "the participation of most of them in the mutiny had been more nominal than real."[80]

Then came the Canning Proclamation which confiscated all lands of the province with the exception of those held by six specified persons and others who could prove to the satisfaction of the Govern-

[73] Holmes : 142 ; See Kaye : V. II, 233-34 for Mr. Tucker's letter to the Governor General on the situation in Oudh in the early days of Mutiny.

[74] Kaye : V. II, 266 ; Micheal Joyce : Ordeal at Lucknow (1938), 46 and 81.

[75] General Mcleod Innes : Lucknow and Oudh in Mutiny, 293.

[76] Kaye : V. II, 266.

[77] Calcutta Review (1858), 64 ; Holmes : 143.

[78] Gubbins : The Mutinies in Oudh, 40.

[79] General Orders, Despatches and Correspondence, 297.

[80] Innes : 42.

ment that they had been loyal to the Government during the Indian Mutiny that the Talukdars of Oudh came into open revolt against the British Government.[81] Now they could afford the "luxury" of fighting the British because by then the back of the mutineers had been broken and there was no danger to their class interests. General Outram urged Canning to treat them as "honourable enemies" and to guarantee them the possessions of their lands.[82] The situation was sufficiently serious to induce Canning to accept the proposal of bringing the feudal aristocracy. It was, therefore, that after the Mutiny "the Talukdars not only recovered their estates, but they received in many cases extravagant privileges to which they themselves had no pretensions, and solemn promises that privileges should be maintained were given by the Government.[83] After the Mutiny about two-thirds of land was owned by great landlords[84] "under the tenure which prevailed at the time of annexation.[85] It was the price of their betrayal that in consequence of the order of confiscation, there followed the full rights and privileges to the Talukdars. No doubt, the British army was "joyfully welcomed by the chief landlords and the respectable villagers."[86]

Exactly similar story was repeated in Bengal. The Zamindars remained actively loyal.[87] This loyalty was easy to understand, because during the Mutiny the Bengal peasant came out openly not only against the British but also against the Zamindars and their agents.[88] The memorial submitted by the Bengal Zamindars in December, 1857 to the Governor General, stated that "so essentially have they identified their interests with the rulers that . . . (they) . . . have in every part of the scene of the mutinies been exposed to the same cruelty which mutineers . . . have displayed towards the British within their reach."[89]

[81] General Innes : 291.

[82] George Campbell also wanted the Government to assure the landlords that "bygones b e bygones," see his "Memoirs of My Indian career."

[83] Strachey ; 381.

[84] Strachey : 382.

[85] Sykes : Compendium of the Laws especially relating to the Talukdars of Oudh 382-383.

[86] Holmes : 434.

[87] Holmes : 458.

[88] Ralph Fox : 27.

[89] Quoted in Asoka Mehta's The Great Rebellion, 65.

The educated classes[90] and the native officials,[91] who were not only the products of British administration in India but were largely dependent thereon for their livelihood, remained loyal to their masters. They knew that if the *Badshahi Hakumat* were established they would have no place in the new social structure of India, being ignorant of Persian and because of their English education, Western notions and non-aristocratic origin.

The merchants in the ports and of the coastal towns[92] actively supported the British army because they had heard of the sad plight of their class brethren under the rule of the mutineers. They very clearly visualised that the success of Mutiny whether under the banner of feudal lords or of the pauperised peasantry and mutinous soldiery would mean their economic death.

It was due to the preponderance of these three classes that there were no disturbances in the coastal areas.

In the villages and towns in the interior the tricky trader and the money-lender who had grown fat under the British land and legal systems, helped the English as long as they could humanly do but helped the mutineers only under duress.[93] They had no place in the village economy nor could they have any if the old village economy was restored.[94] They had also very recently seen the mutineers seizing and plundering[95] their property several times in a very short span of time. They, therefore, longed for the restoration of "law and order" for the resumption of "ordinary routine of trade." And these were the jobs which only the British Government could perform for them because it was only under the British legal system that they could thrive. Kaye found "Much sincerity in those professions (of delight) on the part of the trading classes, who commonly lost more than they gained by these convulsions".[96]

The Mutiny was, therefore, defeated within such a short time, (a year and a half), because of the betrayal by the propertied

[90] Holmes : 143 and 160; Kaye; V. II, 117.

[91] Holmes : 143 and 160; Kaye : V. II, 117.

[92] Holmes : 45, 163, 170 and 183.

[93] Holmes : 252.

[94] For reasons see Strachey's, 427.

[95] Holmes : 352; Kaye : V. II, 234-35; Cooper : 115, 196-7; J. Cave—Browne : V. II, 213.

[96] Kaye : V. II, 259-60, 391; Cooper : 208—212.

classes of India who in order to save their class interests committed suicide as a free people. Of the Rajas and Ranis only Lakshmi Bai of Jhansi fought against the British and gave her very life. Bahadur Shah "fought" under compulsion ; Nana Sahib took the field against the British only as a prisoner in the hands of the soldiers [97]. The Zamindars, both of the British and pre-British times, the merchants and the money-lenders, the educated middle class and the native officials—all sided with the British or kept sullen neutrality as was demanded of them by the circumstances in which they were placed. All looked to the British as their saviours at a time when the Indian peasants were putting up a determined fight to be free both from the foreign and feudal bondages. Only in Maharashtra did the reins of the movement remain in the hands of feudalists led by the Rani of Jhansi. Though the Mutiny was started in order to restore old, outmodeled, antiquated pre-British economy "which had always been the solid foundation of oriental despotism," and of degradation of man to such an extent that "he fell down on his knees in adoration of Hanuman, the monkey, and Sabbala, the Cow," [98] yet it ended as a Peasant War against both the native landlordism and foreign capitalism. It was a class war, the first of its kind in modern India. It was also the first betrayal by the propertied classes in India's fight for freedom.

## V. Its Effects

Although the Mutiny was suppressed within a year and a half yet its effects are very lasting and widespread. It resulted in an alliance between Indian landlordism, money-lenders and foreign capitalism at the cost of poor Ryot.[99] This alliance has lasted to the present day and is the condition of imperialist rule in India. It has landed India into an agrarian crisis which is the main driving force to decisive change because "the national problem is dominantly a peasant problem" in the conditions of a colonial country.

The territorial expansion almost ceased after the Mutiny and the era of imperialist consolidation set in. The difficulties of holding

[97] Forrest: V.I, 420; Kaye : V.II, foot-note on p. 310. Tantia Topi in his evidence before the Court said that the Nana acted under compulsion. He was a prisoner in the hands of the Sepoys.

[98] Marx : Articles on India (1853), 28-9.

[99] Strachey : 381.

such a vast country in subjection with primitive and inadequate means of transport and communications, were brought to light. This gave additional weight to the argument of the British financiers in favour of investing capital in Indian railways, telephone and telegraph system. "But when you have once introduced machinery into locomotion of a country, which possesses iron and coal, you are unable to hold it from its fabrication. You cannot maintain a net of railways over an immense country without introducing all those industrial processes necessary to meet the immediate and current wants of railway locomotion, and out of it there must grow branches of industry not immediately connected with railways. The railway system of India will become, in India, truly the forerunner of modern industry.....Modern industry will.....dissolve the hereditary divisions of labour, upon which rests the Indian castes, those impediments to Indian progress and Indian power." [100] These were the prophetic words of Karl Marx.

The British Government in India began to jealously guard and preserve all the reactionary, social and religious survivals against the demands of progressive rising middle class, in respect of age of marriage, legislation against untouchability, divorce among the Hindus, and the right of inheritance of Hindu women.

The Muslims of India who lost the phantom of their rule in India became antagonistic to English culture and civilisation, philosophy and education. They were made conscious of their mistake by men like Sir Sayad Ahmed Khan but by that time Hindus had made sufficient strides in education, and had well-saddled themselves in the Government services—the only avenue open to the educated classes. This gave rise to Hindu-Muslim problem which still remains unsoluble.

India of to-day has emerged from the invisibly vague outlines drawn both by the rulers and the ruled, in silence and secrecy, in the aftermath of Mutiny and with an eye on it.

[100] Marx : Articles on India, 71.

# WITTICISM IN ARABIC LITERATURE

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135. Abu Ali al-Baṣir said: My father died while I was minor, consequently I was debarred (by legal injunction) from (the disposal of) my heritage. Then I appeared before the judge as a contestant. The judge asked me: Are you (major) mature? I said: Yes. He enquired: Who knows that? I replied: The one with whom I have sexual interecourse. The judge then smiled and vacated the order of my injunction. *Kitab-al-Azkiya*, Page 150.

136. 'Imran b, Haṭṭan who was very ugly and short-statured one day paid a visit to his wife who decorated herself and was a beautiful woman. When he looked towards her she appeared in his eye exceedingly beautiful and graceful and he could not help continuing to gaze at her. So she asked: What is the matter with you? He said: By God, you have become very beautiful. She said: Be happy, becuse myself and yourself will be in paradise! He asked: From what source have you learnt that? She said: Because you have been given one like myself and you have been thankful (to God), and I have been tried by one like yourself and I have been tolerant, and the tolerant and the thankful both will be in Heaven. *Ibid*, Page 155.

137. Al-Ūtba said: I saw a woman whose figure or form was appealing to me, so I asked her if she had a husband. She replied in the negative and I asked her if she had a desire for marriage. She replied: Yes, but I have a nature or quality which, I believe, you will not like. I asked: What is it? She said: The hoariness of my head. I then turned the rein of my horse and proceeded a little when she shouted to me saying: I adjure you by God to stop. Then she came to a solitary place and discovered her black clusters of hairs, and said: By God, I am not yet twenty, but I let you know that we dislike of you what you dislike of us. Al-'Utba said: I was then ashamed and departed uttering the verse: I was seeking her union by adulation, while my old age was winking at her not to agree (to my proposal). *Ibid*, Page 162.

138. An intermediary woman came to a people and said: I have got a bridegroom who writes (shaves) with iron (razor) and seals (finishes) with glass (mirror). They approved and got him married, and to their surprise they found him to be a barber. *Ibid*, Page 166.

139. A man came and said to the Prophet of God: O the Apostle of God! Mount me upon a Camel. The prophet of God replied: I shall not mount you but upon the offspring of she-Camel. He said: O the Apostle of God! It will not be able to bear me. At this the people said to him: God bless you! Is Camel anything but the offspring of she-Camel? Page 309. المستطرف لا حمد الابشيهى

140. An old woman of Ansar came to the Prophet of God and said: O the Apostle of God! Pray to God so that He may admit me to Heaven. The Prophet of God said to her: O the mother of so and so! No old woman will enter paradise. The old woman then turned back weeping and the Prophet of God smiled and said to her: Have you not read the word of God the exalted—Inna Anshana hunna Inshaan fa jaalna hunna Abkaran uruban Atraban (We have caused them to grow into a new growth and we have made them virgins, loving and equals in age.)?

141. Al-Mahdi went out a-hunting and his horse bore him down until he happened to be in the tent of a Bedouin of whom he enquired! Can you give me something to eat? The Bedouin took out for him a loaf or a cake of barley which he ate. Next he gave him the surplus of milk which he drank. Again he gave him the extract of grapes (wine) in a skin which he took in. Al-Mahdi then asked the Bedouin: Do you know who am I? The Bedouin having replied in the negative, Al-Mahdi said: I am one of the personal staff of the Commander of the faithful. The Bedouin said: May God bless you in your position! He then supplied him with the drink again. on drinking the same Al-Mahdi again said: O Bedouin! Do you know who am I? The Bedouin replied: I belive that you are one of the personal staff of the Commander of the faithful. Al-Mahdi said: No, rather I am one of the Generals of the Commander of the faithful. The Bedouin said: May your countries be prosperous (spacious or extensive) and may your intention be nice! He then gave him drink for the third time. When finished, Al-Mahdi again enquired: O Bedouin! Do you know who am I? The Bedouin said: I assume that you are one of the Generals of the Commander of the faithful. Al-Mahdi added: No, rather I am the Commander of the faithful myself. The Bedouin then took the skin and tied it, and said: Leave me, by God if you would drink for the fourth time you would claim that you were the Apostle of God! At this Al-Mahdi fainted away with laugh. Subsequently when his force,

the kings and the nobles joined him, the heart of the Bedouin flew away with fear. So Al-Mahdi comforted him saying: No harm and no fear will befall you! He then ordered a purse and abundant wealth for him. *Al-Mustatraf*, Page 311.

142. A Bedouin named Moses (Musa) stole a purse containing dirhams and then entered the mosque to say his Prayer. When the Imam (leader in Prayer) recited in the course of Prayer—"Wa ma Tilka Bi Yaminika Ya Musa (what is that in your right hand? O Moses!)," the Bedouin uttered—"Wallahi Innaka La Sahirun (By God, you are a magician)," He then threw the bag and came out of the mosque. *Ibid* Page 312.

143 When Marzban, the buffoon or boon companion of Shapur, the king of Persia felt the king's wrong to him in the increasing degree, he learnt the barking of dogs, howling of wolves, braying of asses, neighing of horses and voice of mules, and then managed to enter a place close to the king's retiring chamber and hid himself. Now when the king retired to his bed, he barked like the barking of a dog and the king did not doubt that it was a dog. So he ordered his people to look what it was, when he howled like the howling of a wolf. The king now came down from his bed when he brayed like the braying of an ass. The king then ran off in fright and the servants advanced following the source of sound. Now when they drew near to him, he neighed like the neighing of a horse, and they rushed upon him and brought him out naked. Subsequently when he was presented before the king and the king found him to be Marzban, the king burst out laughing and asked him: What induced you to do what you have done? He replied: God the exalted and the glorious transformed me into a dog, a wolf, an ass and a horse when the king became angry with me. The king then ordered that the robe of honour might be bestowed on him and that he might be reinstated to his former position. *Ibid*, Page 313.

144. During the reign of Harun al-Rashid a man claimed to be a Prophet. When he appeared before him, Harun asked: What are the people speaking of you? He said: I am indeed a noble Prophet! Al-Rashid asked: What does testify to the veracity of your claim? He said: Ask what you want. Al-Rashid said: I want that you will render these beardless slaves bearded just now. The man bent down his head (kept silent) for a while and then lifted his head and said: How can it be lawful to render these beardless

bearded and change these beautiful figures? I can rather render these bearded ones beardless in a moment. At this al-Rashid laughed and forgave him, and ordered for him a reward. *Ibid*, Page 319.

145. Abu Uthman al-jahiz said: A beggar stopped with a people and said: I am hungry. They said: You are a liar. He said: Try me with two pounds of bread and two pounds of meat. *Ibid*, Page 321.

146. A woman heard a Muazzin (one who announces the hours of Prayer) crying Azan (call to Prayer) after sun-rise and saying-"al-Salatu Khairun Minal-Nowm" (Prayer is better than sleep). So she uttered—"Al-NowmuKhairun Min Hazihi-al-Salat." (Sleep is better than this Prayer). *Ibid.*

147. It is narrated that Harun-al-Rashid passed a sleepless night and consequently he felt uneasy. He called in his Vizier, Jafar b-Yahya, the Barmekide and explained the situation to him while Masrur, his servant who was standing before him laughed. Harun took exception to this and asked Masrur why he laughed. Masrur stated with due respect: I went out yesterday to the shore of the Tigris where I found a number of people collected. I stopped and saw a man named Ibn-al-Maghazeli standing and causing the people to laugh. Now I am reminded of some of his playful stories and talks. That is why I laughed. Pray pardon me, O the Commandar of the faithful! Harun then ordered to present the man before him immediately. Masrur came to Ibn-al-Maghazeli and said: The Commander of the faithful wants you and I shall lead you to him on the understanding that you will give me three-fourths of what he will give you. Masrur refused to accept half which Ibn-al-Maghazeli offered but agreed to take two thirds and that was also after much higgling. Ibn-al-Maghazeli then appeared and Harun said to him: If you can make me laugh I shall give you 500 dinars (gold coins) and if you fail, I shall strike you with this leather-bag three strokes. Ibn-al-Maghazeli took tfie word a fun and the leather-bag empty, so he commenced doing his business and displayed some such wonderful acts as might make the hard rock laugh, but Harun did neither laugh nor smile. At this Ibn-al-Maghazeli was surprised and frightened. Harun, therefore, said to him: Now you deserve strokes. He took the leather-bag which contained four pebbles weighing two pounds (lb) each, folded it and gave him one stroke which hit his neck and made him shriek aloud. Ibn-al-Maghazeli then remembered the contract

he had made with Masrur, so he broke forth: Pardon, O the Commander of the faithful! Hear two words from me! Harun said: Say what has occurred to your mind. Ibn-al-Maghazeli stated: Masrur made a contract with me that he would take two thirds of what you would give me. Now I have taken my share of one stroke out of three and his share remains. At this Harun laughed, called in Masrur and gave him one stroke which made him cry. Masrur then spoke out: O the Commander of the faithful! I yield to him what remains! Harun then laughed and ordered for them one thousand gold coins which they took half and half, and Ibn-al-Maghazeli departed giving thanks. *Ibid*, Page 323.

148. Banu Rasib (Ar. Rasab means to sink) and Banu Ṭufawah (Ar. Ṭafw means to float) contested before Ziyad over a boy whom they claimed, and both set up evidence in support of their claim and the matter seemed ambiguous to Ziyad. So Sād al-Rabiyah said: May God correct or guide the Prince! The judgment upon this boy has become clear or obvious to me. I have witnessed the evidence in favour of Banu Rasib and Banu Ṭufawah. So authorise me to decide the case between them. Ziyad asked: What is your judgment in the matter? He replied: My opinion is that the boy should be cast into the river, then if he sinks, he will belong to Banu Rasib and if he floats he will belong to Banu Ṭufawah. At this Ziyad took up his shoes and stood up overpowered with laugh. *Al-Iqd-al-Farid*, Part IV, page 374.

149. Ashab said: I saw a dream half true and half untrue. They asked: How is that? He said: I found myself carrying a bag of money and under the hardship of its burden I was passing stool within my clothes. Then I woke up and to my surprise I was passing stool and there was no bag. *Ibid*, page 375.

150 Al-Hajjaj whipped a Bedouin seven hundred stripes who was uttering at each stripe—'Shukran Laka ya Rabbi: (I thank you, O my Lord!) Then Ashab met him and asked: Do you know why al-Hajjaj whipped you seven hundred stripes? He replied: I do not know. Ashab said: This is owing to the abundance or increase of your gratitude towards God, the exalted who says—'Lain shakartum La azidannakum.' (If you are grateful, I would certainly give you more). The Bedouin then said:

My Lord! Thank not I, so give not more to me!
Withhold reward of the grateful from me! *Ibid.*

151 There occurred a doubtful night of the month of Ramaẓan, and many a person began coming to al-Aʿmash asking him about fasting in the circumstance. He became tired of answering, so he sent some one to his house and a pomegranate was brought to him. He split it and placed it before him.

Now whenever he saw a man approaching him with the intention of asking him about fasting, he took a seed and ate it, and thereby saved the man from asking and himself from answering.• *Ibid*, page 376.

152. One of the students of al-Aʿmash said: I prepared for al-Aʿmash a food to which I invited him. He proceeded with me and I was leading him till his leg fell into a hole or cavity which the boys make for ball (game). He asked: What is this? I replied: This is a hole or cavity which the boys make for a ball (game). He said: No, rather you dug it so that my leg might fall into it, by God I shall not eat food this day at yours. I then carried food to him. After that again I prepared a food for him and invited him to it. He said: Admit me first to the bath-room. Then I introduced him into the bath-room. Now when I came to pour hot water on his head, he said: What called (prompted) you to do this, do you want to skin or flay my Nape or occiput? By God I shall not eat food at yours this day. I then bore food to him. *Ibid*, page 376.

153. A man was appointed judge (qaẓi) of al-Ahwaz. His salary or allowance was delayed and he had not by him what he would offer as sacrifice on the Sacrificial Day (Yawm-al-Aẓha), and what he would expend. He then complained of this to his wife and informed her of the difficulty he was in and his inability to offer a sacrifice. She said: Don't you worry! I have a big cock which I have fattened. We shall sacrifice it on the Sacrificial Day. His neighbours got the news and presented to him thirty rams without his knowledge while he was at al-Musalla. When he returned to his residence and found there those sacrifices, he asked his wife: Wherefrom are these Sacrifices? She said: Such and such persons (She named a number of people) presented them to us. He said to her: Preserve this our cock, because it is more precious to God than Ishaq (Prophet Isac) son of Ibrahim (Prophet Abraham) who was ransomed by one ram and this our cock has been ransomed by thirty rams. *Ibid*, page 378.

# RAJA GANESH OF BENGAL

S. M. IMAMUDDIN, M.A.

THE story of the successful ousting of the Ilyas Shahi dynasty by Raja Ganesh from the throne of Bengal at the beginning of the 15th Century A. D. is one of the most exciting episodes in the Muslim history of Bengal. The Raja's brief reign constitutes a temporary break in the continuous sequence of Muslim rulers from early in the 13th Century till the beginning of the 19th Century A.D.

Raja Ganesh was the Raja Kans of Ferishta and of Ghulam Husain Salim, the author of the Riyaz-al-Salatin. He is also mentioned under the name of Kansi[1] in the Ain-i-Akbari.[2] Ghulam Husain Salim mentions him as a Zamindar of Bathuriah, who gradually increased his power and prestige in the service of the Ilyas Shahi dynasty and ultimately seized the government.

The Tabaqat-i-Akbari merely notices Kans's usurpation of the throne. Ferishta says that the heathen named Kans, who was one of the courtiers of the Ilyas Shahi dynasty, acquired much power and strength and became the *defacto* ruler of the country during the reign of Shah Shamsuddin. When the latter died in 787 A.H., he openly declared himself as King. Ferishta also says that though not a Musalman, Kans was a friend of the Musalmans.[3]

Ghulam Husain Salim gives the best account of the reign of the Raja based perhaps on local traditions.[4] He relates that in 775 A.H. Ghiyasuddin was treacherously killed by Raja Kans a Hindu Zamindar of Bathuriah, and was succeeded by his son or adopted son Shamsuddin. In the year 788 A.H., the latter was attacked by Raja Kans, who slew him and usurped the throne. Raja Kans then subjugated the whole kingdom of Bengal and began to oppress the Muslims. His aim was to extirpate Islam from his dominions. He killed many of the learned and holymen including Shikh Badr-al-Islam, the father of Sheikh Muinuddin 'Abbas: This enraged sheikh

1. Stewart, p. 93 spells the name 'Kanis' This seems nothing but Ganesh,
2. The Ain-i-Akbari I, pp. 413 and 415.
3. The Persian Text of the Tarikh-i-Ferishta, Part II, p. 297.
4. The Reyaz-al-Salatin translated into English by Abdus-Salam, pp. 111-117.

Nur Qutb-al-'Alam, who invited Sultan Ibrahim of Jaunpur to invade Bengal. The latter responded to his call, reached Bengal and encamped at Firuzpur. The Raja, being frightened sued for peace. The saint Qutb-al-'Alam agreed to make peace on condition that he should accept Islam. The Raja excusing himself as being old, brought his son Jadu, who was then 12 years old, to his presence and asked the Sheikh to convert him to Islam. Jadu was accordingly converted to Islam and proclaimed king of Bengal under the Muslim name of Jalaluddin. The Sultan, being annoyed, returned to Jaunpur and died. Raja Kans, hearing that Sultan Ibrahim had died, removed his son and himself usurped the throne. He also reconverted his son to his own creed, but Jalaluddin did not abandon his new faith. Raja Kans again commenced his oppressions. Sheikh Anwar complained to his father Qutb-al-'Alam against the Raja's tyranny. The saint replied that unless Anwar's blood was shed, the Muslims would not be rescued from the Raja's oppression. This soon proved true; for Raja Kans died on the very day and at the very moment when Anwar was murdered at Sunagaon. Ghulam Husain Salim says that according to some accounts, the Raja's son Jalaluddin, who was in prison, leagued with his father's servants, and slew him. The oppressive rule of the Raja lasted for seven years.

The above accounts, which have been summarised from the Riyaz-al-Salatin throw a good reflection on the subject. The dates given by Salim are mostly incorrect as Blochmann has justly pointed out; so they have been purposely left out here.

There is a Persian manuscript of the 16th Century A.D. found in possession of some inhabitant of Pandua, as given in Major Franklin Hamilton's 'Historical Descriptions of Dinajpur.' Some extracts from it are given below:

"Ghiyasuddin governed 16 years, and was susceeded by his son Syafuddin, who governed 3 years, and was succeeded by his slave Sahabuddin, who also governed 3 years. Then Ganesh a Hindu and Hakim of Dynwaj,—seized the Government. Enraged at Sheikh Bador Islam and his son Fyez Islam, who refused to give him the

[1] This village is the Headquaters of the subdivision of the same name in the Santal Parganas District, Bihar. It is situated in 25°3′ N and 87°50′ E., on the right bank of the Ganges. It is now a mere collection of mud huts. The ruins of the old Muslim city extend for about 4 miles to the west of the modern village.

compliment due to the rank, he had assumed, he put them to death. The saint Kotub Shah, who was still alive, disgusted at his action, wrote to a Sultan Ibrahim—who, in compliance with the request came from Rajmahol[1] with an army, and encamped at Satra. The Raja of Dynwaj was then terrified and applied, in great penitence, to Kotub Shah and obtained his forgiveness by making his son Godusen, a Muhammadan. This convert assumed the Government under the name of Jalaluddin, having been reconciled to the saint, and attacked Ibrahim Shah—and, having put him to death (?) seized on his Government. The old man Ganesh then confined his son and seized on the whole kingdom. After having been 4 years in confinement, Jalaluddin recovered the Government, and compelled the Hindus to become Muhammadans, but many of them fled to Kamrup." [1]

The above extract throws a good deal of light on the subject, but perhaps is based on local traditions. No chronological account is given.

There we find some coins of a certain king, named Danujmardana, issued from Sunargaon, Chatigram (Chittagong) and Pandunagar of the dates 1339-1340 saka era (1416-1418 A.D.). The issue of coins from the above mints clearly shows that he was the king of the whole northern and eastern Bengal early in the 15th century A.D. He was certainly a Hindu King, but we do not find any Hindu King other than Raja Ganesh ruling Bengal at that time in the histories, written by the Muslims. As the period of their rule coincide, it is very probable that Raja Ganesh and Danujmardana were one and the same as supposed by Mr. N. K. Bhattashali.[2] In the Balyalila sutra it is mentioned that the saint Advaita's grandfather, Nrisinha Narial, was invited from Sylhet (a town in Assam) by Raja Ganesh to Dinajpur and that it was through Nrisinha's advice as minister to the Raja that the latter, became king of Gaur in 1407 A.D. (?).[2] Side by side with this we find some references to Danujmardana Deva also. In the autobiography of the poet Krittibas it is mentioned that his great-great-grandfather Nrisinha Ojha settled at Phulia[3] and became minister to a king called Danuj.[4]

[1] J.A.S.B.—1930, p. N6.

[2] H. E. Stapleton's Tour in the Districts of Maldah and Dinajpur—J.A.S.B.—1932 p. 166.

[3] Phulia is close to Santipur, Dist. Nadia.

[4] J.A.S.B.—1930, pp. N6-N13.

Here, from the mention of probably the same man Nrisinha Ojha (Nrisinha Narial) in the two separate works, as the minister of both Raja Ganesh and Raja Danuj, it may be inferred that Raja Ganesh and Raja Danuj were one and the same king. The mention of Raja of Dynwaj' in the Hamilton's MS may be a corruption of the first of the regal title of Raja Ganesh—*viz.*, Raja Danuj (راجه دنوج). (Raja Ganesh might have adopted this title as he ousted the Muslim king from the throne, killed many Muslim saints and overcame the Muslims in general. 'Danujmardana Deva' means 'destroyer of demons.' The Muslims were considered demons by the Hindus of the time. Hence Raja Kans was justified to adopt such a title.)

The numismatic evidence of the period may thus be tabulated:— Shahabuddin Bayazid and 'Alauddin Firuz Shah ruled Bengal in 817 A.H. (1414-1415 A.D.). Danujmardana's coins minted at Pandunagar, Chatigram (Chittagong) and Sunargaon are found of Saka 1339-1340 (1416-1418 A.D.) and some coins of a certain Mahendra Deva are also found, issued from the same mints, of the dates saka 1340-1341 (1418-1419 A.D.). The coins of Jalaludnin are found of 821 A.H. (1418-1419 A.D.) and onwards.

In clearing up the controversial point we have to rely entirely on the statements of the Muslim historians and the numismatic evidence of the period. The only actual gap in the dates between 817 and 821 A.H. is in the year 820 A.H. (1417 A.D.), when Raja Ganesh was ruling over Bengal and this is completely covered by the coins of Danujmardana Deva, dated Saka 1339-1340 (1416-1418 A.D.). A short review of the above summary of the dates on the coins of this period shows how completely they fit in with the story as given by the Muslim historians.

(The following is a brief account of the circumstances leading to the rise and fall of Raja Ganesh on the basis of the data at our disposal. The Muslim historians say that Raja Ganesh was the Zamindar of Bathuria[1] and was serving under the Ilyas Shahi dynasty. Prof. Blochmann identifies the present 'Raja Kans' with Raja Kans Narayan of Tahirpur, which is included in Bathuria. He identifies the latter place as part of old Barendra in Rajshahi proper, between Amrul and Bogura and signifying Northern Rajshahi

[1] This is a tract of country, which lay on either side of the Atrai river (*i.e.* south-east corner of the present Rajshahi Division).

proper including Tahirpur. He also considers that the name 'Rajshahi' is connected with Raja Kans, who was a Raja-Shah, that is a Hindu Raja, who ascended a Musalman throne.[1] Mr. Westmacoff identifies Raja Ganesh with the well-known but hitherto legendary Hakim Ganesh of Dinajpur, an inference that may already be found in Hamilton's manuscript and in the Balyalila Sutra. There is a strong tradition current in the Dinajpur district that Karanji[2] was the birth place of Raja Ganesh. Near the villlage of Karanji there is a spot called Ganeshpara, which is one mass of large bricks, and, immediately to the west of this, there is a half-ruined temple called Sachika Devi Than or Kans Rajar Pujar Than (place of worship of Raja Kans, *i.e.*, Ganesh).[3] Mr. S. K. Saraswati says "Ganeshpara and Kans Rajar Pujar Than lend support to the local tradition in the district of Dinajpur that Karanji was the native village of Raja Ganesh.[4]

Mr. H. E. Stapleton says, "Ganesh was a Hindu Raja of Koch descent, whose original zamindari was at Karanji. Possibly he had enrolled the local Kochs round his zamindari as Paiks and trained them into a sufficiently useful militia to enable him to establish himself as a more than ordinarily powerful nobleman under Ghiyasuddin 'Azam shah: or he may have established his authority over the Kochs by offering them—for a consideration—nominal admission into the Hindu Caste system. As his influence at court increased, he extended his zamindari southward to include the moated City of Ekdala-Bairhatta, where he placed his son Mahendra as Governor, to gather in more Koch recruits from the north and draft them on, when trained, to increase his father's command at Pandua."[5] But most probably Raja Kans belonged to the Barendra Brahmin family. The Brahmin families of Santra and Bathuria are said to have been granted jageers by Ilyas Shah. Raja Ganesh's forefathers, according to the Muslim historians, were serving under the Ilyas Shahi dynasty, as there were many tolerant kings in this dynasty. However, he

[1] J.A.S.B.—1875, p. 287

[2] Karanji is situated at a distance of five miles south of Katihar Dinajpur—Parbatipur Railway line and 9 miles north-east of Brajaballabhpur.

[3] Mr. H. E. Stapleton's Tour in the Districts of Maldah and Dinajpur—J.A.S.B. 1932 p. 167.

[4] Notes on two tours in the districts of Maldah and Dinajpur by Mr. S. K. Saraswati—J.A.S.B., 1932, p. 180.

[5] J.A.S.B.—1930. p. N6-N13

began to acquire power and influence over the political affairs of Bengal during the latter part of the reign of Sultan Ghiyasuddin, whom he killed treacherously in 813 A.H. (1410 A.D.) and placed his son Saifuddin Hamzah on the throne, who ruled for about two years (814-815 A.H.).

Hamzah was succeeded by his adopted son or slave Shahabuddin Bayazid (816-817 A.H.) He died a natural death or might have been slain by Raja Ganesh, who was then trying to occupy the throne. Raja Ganesh did not sit on the throne, but placed prince Ala'uddin Firuz on it as a mere puppet King. The Hindu noble at last gained so much power and strength that he killed his own worthless young master and usurped the throne. All this happened in 817 A.H. (1414 A.D.), but perhaps the de-facto ruler could not issue coin in his own name in 817 A.H., partly because of his unsecure position and partly because soon he had to abdicate the throne in favour of his son Jadu (or Chitmul جتمل)[1]

Raja Kans killed Sheikh Badr-al-Islam, father of Sheikh Moinuddin 'Abbas perhaps in order to safeguard his prestige and many learned Muslims due to jealousy. This caused the Muslim saint Nur Qutb-al-'Alam, son of Ala'ul-Haque[2] of Pandua to persuade Ibrahim Sharqi of Jaunpur to invade Bengal Circa (817 A.H.). Accordingly the Sultan came up to Firuzpur (perhaps Maldah), when the Raja being alarmed at once sued for peace. The saint agreed on condition that the Raja should accept Islam. Raja Kans told him that he had become old and so his conversion would not be of so much importance and beneficial to Islam as that of his son Jadu, to this the saint agreed. Accordingly Sultan Ibrahim Sharqi returned to Jaunpur, Jadu was converted to Islam and was named Jalaluddin and Raja Ganesh abdicated the throne in favour of his son.

In 818 A.H. (1415-1416 A.D.), Nur Qutb-al-'Alam died[3] and

1 The Tarikh-i-Ferishta—Newal Kishore Press edition—Part II. p, 297.

2 See for Ala'ul-Haque's long biography 'Miral-al-Asrar'—Ivandue No. 64 foll. 482-485.[b]

3 The inscription "Kitaba," in the possession of the Khadim of the shrine of Nur Qutb-al-'Alam at Pandua, gives 7 Zilqada 818 A.H. as the date of the Sheikh's death and نور بنور شد (Nur Banur shud), as [the chronogram, (J.A.S.B., Vol. LXI, Part I, 1892, p. 124).

Again according to Beveridge this date is confirmed by Miral-al-Asrar (Br. Museum MS. No. Or. 216 fol. 479[b]). It gives the date as 10 Zilqada, 818 A.H. and also gives the

according to Riyaz, Sultan Ibrahim also died in the same year, but Blochmann differs from the view and put the Sultan's death in 845 A.H. Raja Ganesh, being freed from the Sheikh at least, ejected his son from the throne, imprisoned him and even tried to re-convert him to Hinduism, but perhaps did not succeed in this attempt. He, however, usurped the throne of Bengal. (H. Beveridge says, "Ghulam Husain represents Rajah Kans as a cruel and bigoted tyrant. He describes him just as a worshipper of Krishna would describe Rajah Kans of Mathura, and no doubt allowance must be made in both cases for religious prejudices. But, cruel tyrant or not, Rajah Kans is the most interesting figure among the kings of Bengal. We feel that this obscure Hindu, who rose to supreme power in Bengal, and who for a time broke the bonds of Islam, must have been a man of vigour and capacity. He reminds us of the unfortunate Hemu, who opposed Humayun.")

It is said that Raja Kans greatly oppressed the Muslims and even wanted to extirpate Islam from his dominions. In support of this view the Historians say that he was poisoned to death by his converted son Jadu to save the Muslims from his tyranny. This, however, does not appear to be true. Raja Kans was no longer in a position to curb the Muslims, for they were still powerful, as is proved by the episode of Nur Qutb-al-'Alam and Ibrahim Sharqi. Later on his son Jadu (Jalaluddin) had to depend on the help of the Muslim nobles. After Ganesh there was a king named Mahendra Deva, who issued coins in

same chronogram نور بنور شد (J.A.S B., vol. LXXI, Part I—1902, p. 46). But the Royal Asiatic Society's MS. is silent in this case. The extract is given below :—

پس او مدت هفت سال حکومت کرده در گذشت سلطان جلال‌الدین بن راجه کنس بعد از فوت پدر دید که بامسلمانان صحبت برار نخواهد شد از سبب سلطنت مسلمان گشت و بخدمت حضرت شیخ نور قطب عالم بن حضرت شیخ علاوالحق قدس سره مرید شد و اعتقاد و اخلاص تمام بهمرسانید و مدت هفده سال سلطنت بے دغدغه کرده در سنه اثنی و ثما نمائة در گذشت' رحمة الله علیه - سلطان احمد بن سلطان جلال‌الدین بعد از پدر بر تخت سلطنت بنگاله نشست او نیز مرید حضرت شیخ قطب عالم بن شیخ علاوالحق قدس سره بود و برنگ غلامان خدمت حضرت شیخ نور قطب عالم بن شیخ علاوالحق میکرد - و مدت هژده سال سلطنت بنگاله کرده در سنه ثلثین و ثما نمائة وفات یافت - ازان وقت گرفته تا سنه تسع و تسعمایة دوازده نفر دیگر از قوم مختلف در ملک بنگاله سلطنت کرده اند و هر کدام مرید و معتقد فرزندان حضرت شیخ علاوالحق بودند -

Miral-al-Asrar foll. 482-486, R.A.S.B. Persian Society Collection No. 264.

imitation of those of Danujmardana Deva, dated 1340-1341 Saka era. This Mahendra was probably a son of Raja Ganesh, who was set up as his successor after his death. The references to a younger brother of Jadu by Ferishta appears to corroborate the theory that he might have succeeded his father Raja Ganesh with the support of the Hindu nobles, but soon he was perhaps slain by his elder brother and rival Jadu (Jalaluddin). The superiority of the Muslim nobles is further proved by the immediate fall of the new dynasty and the restoration of the Ilyas Shahi dynasty. Raja Ganesh ruled Bengal in various capacities, virtually for 7 years, but the period between 1339-1340 Saka (1416-1418 A.D.) marked the climax of his power. He died in 1418 A.D. He founded a dynasty, which although it lasted for a short time, was a great patron of literature, art and architecture.

# MOULĀNĀ *RŪMĪ'S CONCEPTION* OF LIFE AND DEATH

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Moulānā Rūmī says, 'A Life is the harmony of contraries, and the death (in it) is the fact that there arose conflict between them.'—

Zindagānī āshtiy-ī-ẓiddhāst
Marg ān kāndar mīyānshān jang khāst.

Now, what are these contraries? The contraries are the different elements constituting a combination which lasts as long as there is harmony in it, and dies out the moment there is disharmony in it. For the 'form,' the different elements are water, earth, fire and air,—the harmony in the combination of which brings the existence of the 'form,' and the moment there is clash among the different elements, it will die of its former from and take a new shape, bringing forward a new harmony among them. For the 'spirit' also there are different elements which are the different tendencies of the mind constituting a combination which lasts as long as there is harmony among its different contrary tendencies; as for example, a line of thought which is a combination of the different ideas of the mind, will develop into a new way of thinking, when there is conflict among the different contradictory tendencies of the first group of ideas. Every moment there is reformation of the combination which breaks itself of different ideas clashing together, and brings forward a new combination with a harmony behind it. This ever continuing life and death goes on till it meets the 'Ultimate.' As the Qurān says, "And you were without life (lit. dead), so He gave you life; then He causes you to die, and again brings you to life, and to Him again will you return." (II, 28.)

Moulānā Rūmī is never tired of expressing his Sufistic ideas. And he says in the fashion of the Qurān, "The form was born of the 'word,' again it died; the wave of the same was again mixed with the Sea.—The form came out from formlessness, again it returned (to its place), for 'verily unto Him we are returning.' (Qurān, II, 151). Accordingly every moment you are dying and

returning, (as) Muṣṭafā (Prophet Mohammad, the chosen one) declared that the world is (but) a moment[1]. . . . . Every moment the world is renewed, and we are unware of its being renewed as it (seemingly) lasts. Life is ever renewed like a stream, though formally it seems to be continuous. From its swiftness, it appears to be continuing, like the flash (of a light) which you whirl round in your hand.[2]—The 'Word' surely refers to the creative word, 'Kun' (Be) of the Quran, which says, "He is the One that gives life and death, and when He decides upon an affair, He says to it, 'Be,' and it becomes." (40 ; 68). How beautifully the poet describes of the nature of creation. The created things or beings with their natural attributes or characters are like so many waves which rise from the Sea and are again mixed with the Sea. They come from the sea, they stand on the Sea and are again mixed with it. In the same way though at every moment the waves are taking a new shape, they appear to be continuous. These long lines of waves begin and end in a single point which is the Essence of God, and is perceived by us in the form of space. The Prophet who realised the situation can only utter. 'the world is but a moment.' For to him it is a flash of light (Devine Illumination, tajalli) revealing the One as many. But to our minds this duration of a moment brings forward the illusion of time; and we think that the world is lasting. Really the world has no existence, but so long we are ertangled under the illusion of time and space, we cannot understand the Real. As the poet declares in his Dīwān, "My place is placeless, my trace is traceless; it is neither body, nor soul, for I belong to the soul of the Beloved."[3] Only a Perfect Man or a Ṣūfī who has realized God can say thus. But we, under the bounds of time and space, cannot realize the situation ; as the poet explains in his Masinavi which is a book in six volumes expounding the theory of Ṣūfism in his grandest style. The poet continues, "If you whirl round a stick of fire, it appears to the sight as a long line of fire ; this length of time is from the swiftness of creation (of God) which presents the rapidity of (Divine) creation."

Ibnul Arabī in his Faṣūs al Hikam says, "What is called Death is not annihilation but only disolution (Laysa bi-idāmin wa innamā

[1] *Cf.* 'yet they are in doubt concerning a new creation'—Qurān, 50 ; 14.
[2] Masnavī, Vol. I, edited by R. A. Nicholson, Pt. 1, p. 71.
[3] Selections from the Dīwān of Shams-i-Tabrīz, xxxi, 6.

huwa tafrīqun)." Every being or thing is a combination of a body and a spirit with their different elements shaping each of them. When the bodily elements are dispersed, God assembles the attributes of the spirit together and fashions for it another Vehicle, visible or invisible, appropriate for it, for the reason that the faculties of the spirit cannot without a body serve or function the will of God. How beautifully the poet says of the combination of the body with the elements—earth, water, fire and air, and its disolution, when death comes with the separation of the different elements forming the body. He says in his poetic fashion: " Earth says to the earth of the body, 'Return, take leave of the spirit, come to us like the duel. You are of our species, and more suited to us. Therefore, it is better that you escape from that body and its moisture. It answers, 'yes, although like you I am weary of separation (from my origin), but I am fettered. (In the same way) the waters seek the moisture of the body, saying, ' O moisture, come back to us from the exile.' The ether recalls the heat of the body, saying, 'you are of fire, take the way to your origins.' " The body has been formed of these different elements which though contrary to each other, are in harmony in the body. The body will continue to live and grow as long as there is harmony of these elements, and the moment there is conflict of these elements, there comes a disease in the body, and the conflict is such that the body cannot bear the pressure of this conflict, it yields to this pressure and dies out, which causes the separation of the different elements of the body to their original sources. As Rūmī continues, "There are seventy two diseases in the body caused by the elements pulling without cord (not visible). The disease comes to break down the body, so that the elements may abandon each other. These elements are (like) four birds with their legs tied together—death, sickness, and disease loose their legs When death released their legs from each other, every bird element must fly away. Every moment the attraction between these originals and their parts, puts forward some pain in our bodies ; so that it may rend asunder the combination (of the elements in the body, and each part, like a bird, may fly to its origin." Though these elements separately are always trying to break down our bodies, which can be easily imagined when we suffer disease which is surely for the overpowering influence of one element over the others, as we suffer cold owing to the dominating influence of coldness (which is the nature of water) over the other elements in the body, yet our spirit is always

saving the body from the overpowering influence of any of them, for he has desires which are to be fulfilled through the body. The body is earthly, but the spirit is divine, and by the Divine Ordainment it has come to the body to serve the divine purpose. We often forget this thing and our spirit being mixed with earthly things, turns to be earthly, and forgets its divinity, which it is in its essence. But God knows everything ; and He is always bringing us forward to right direction, to serve the ultimate purpose which is the knowledge of God. Therefore, "the Divine Providence hinders them (the elements) from this hastening (to rend asunder the body) and keeps them together till the appointed term, and He says, 'O parts, the term (of death) is not certainly known to you, it is useless for you to take to wing before the (appointed) term.' (Now) as every part (of the body) is seeking its source, what must be the state of the spirit, a stranger, in separation (from God)? The spirit also says, ' O my base earthly parts, my exile is more bitter (than yours), for I am celestial.'[4] " The spirit when he is separated from the body at the time of death, finds him a stranger in his earthly surroundings. As he has not realised his real position, he is afraid at the time of death. He does not find any support to rely. But one who has realised the real state, is not afraid of his separation from the body ; for he knows that this is the great opportunity of releasing himself from the entanglement in a state of exile in the body, being separated from God. As our poet says, "O Son, death of every one is according to the same imagination as his,—before an enemy (of God), it is an enemy, and to a friend (of God) a friend. Whoever sees it to be (lovely as) Joseph,[5] sacrifices his life for it, and whoever sees it to be (like) a wolf, turns back from the (path of) right guidance . . . . . That one in whose eyes death is destruction, he supports the command (of the Qurān), 'Do not cast (yourselves into destruction')[6] ; and that one in whom death is the opening of the Gate (of Bliss), to him comes as (Divine) call,[7] 'vie with one another in hastening.'[8]

4 Masnavi, Vol. III, edited by R. A. Nicholson, Pt. 3, pp. 252-3.

5 Joseph, an ideal character in the Qurān, Chap. 12; and the story of Yūsūf and Zuleikhā is famous throughout the Persian poetical world.

6 Q. II. 195. 'And spend in the Cause of God and do not cast yourselves into destruction with your own hands, and do good to others, for God loves those who are good to others.'

7 Q. III, 132, 'vie with one another in hastening to Forgiveness from your Lord, and a Garden, the extensiveness of which is as the heaven and the earth,—it is prepared for the righteous.'

8 Masnavī, Vol. III, ed. by R. A. Nicholson, Pt. 3, p. 196.

In death we surrender our physical life, but the spirit in the body is not lost with this death, it goes back to a plane of existence where it is more conscious of the realities of the spiritual world. The Qurān says, "It is God that takes the spirit (of men) at the time of their death, and those that die not, during their sleep ; then He withholds those on whom He has passed the decree of death and sends the others back (to their bodies) till an appointed time ; most surely there are signs in this for a people who reflect." (39 ; 42) Again, "It is he who takes your souls at night (in sleep) and He knows what you have done in the day ; by day does he raise you up again, that a term appointed may be fulfilled ; in the end unto Him will be your return." (6 ; 60). Yusuf Ali, the translator of the Holy Qurān, in explaining the above line remarks, "The mystery of sleep, 'the twin brother of death, is called the taking of our souls by Him, with the record of all we have done in our waking moments, and this record sometimes appears to us in confused glimpses in dreams. By day we awaken again to our activities, and so it goes on until we fulfil the term of our life appointed for this earth. Then comes the other sleep (death), with the longer record of our Day (Life) ; and then, in the end comes the Resurrection and judgment, at which we see everything clearly and not as in dreams, for that is the Final Reality."

The Reality or the Realization of God will be obtained by every one on the final day of the world, *i.e.*, on the Day of Resurrection, when every one will be reawakened and will know the proper state of his self. According to the Sūfis, the final day is not the day when everything of this world will be ruined, and everyone is to present himself before the Lord for the proper judgment, as is ordinarily understood. It is the 'fanā' or the ruining of the self, being absorbed in the thought of God, when no idea of the thought of this phenomenal world will remain. This phenomenal world is ruined to him, in his ecstatic state, and then he sees clearly the reality of every affair ; his state is asleep to the affairs of the world, but awakened to the State of Reality which state is called Hāl and Maqām (the State of Ecstasy and final Constancy with God). And Rūmī while expressing the state of a sleeping man says, "There is no sorrow, no thought of gain or loss, no fancy of this person or that person. This is also the state of the 'ārif (Knower of God), even without sleep. God said, ' (And you might think them awaken),

while they were asleep (and we turned them about to the right and to the left, while their dog lay out stretching its legs at the threshold') [9]—do not turn away (from this, *i.e.*, do not disbelieve this)." [10] The Sūfī teacher Najmuddin Kubrā expounds this quotation of the Qurān thus : And you might think them awake because of the light which you saw on their faces, while they were asleep, signifying that they died (fanā) to their existence and had been made everlasting with the life of God, and we turned them about between being naughted and being made everlasting, and ascending from a lower station to a higher, while their dog ... etc., *i.e.*, their Carnal souls were slumbering and inactive." [11]

The State of Reality may well be compared to the State of sourd sleep. And every night we are getting the opportunity of realising that state of mind, but as we are not satisfied with our desires of the world, every following day we are given back to this world of fancy. In this way our days continue on till the time of death. As Rūmī says, "Though we are entangled with thousands of snares, when you (God) are with us there is not any trouble. Every night you are releasing the spirit from the entanglement of body (Carnal desires) and erasing (the impressions) from the tablets (of the mind). The spirits are relieved of this cage (of body, or of the world) every night, and are set free from the ordinances, philosophies and stories (of this world which only entangle our bodies and minds, but they do not come to any help in our realization of God, which can only be obtained in the absorbtion of God, by leaving all the laws and the fancy ideas of the world) ... He (God) embodies the spirits divested (of the body), and again makes each body laden (with daily works and its thoughts). He makes the horse of spirits free of the saddle, —this is the mystery of 'sleep is the brother of death'. But in order that they (spirits) may return (to the body) in the day time, He puts a long fetter on the leg, so that in the day tine He may lead it back from the meadow (of spiritual attributes which is the land of Bliss) and bring it under load from that pasture."[12]

Now "what is sleep ? As far as the animal life is concerned, it is the cessation of the working of the nervous system, though other animal functions, such as digestion, growth, and the circulation

9 Qurān, Chap. 18; 18.
10 Masnavī, Vol. I, ed. by R. A. Nicholson, Pt. 1, p. 25.
11 Commentary of the Masnavī by R. A. Nicholson, Pt. 7, p. 40.
12 Masnavī, Vol. I, ed: by R. A. Nicholson, Pt. 1, pp. 25-26.

of the blood, continue, possibly at a different pace. It is repose of the nervous system, and in this respect it is common to men and animals, and perhaps even to plants, if, as is probable, plants have a nervous system. The mental processes (and certainly volition) are also suspended in sleep, except that in ordinary dreams there is a medley of recollections, which often present vividly to our consciousness things that do not or cannot happen in nature as we know it in our co-ordinated minds. But there is another kind of dream which is rarer—one in which the dreamer sees things as they actually happen, backwards or forwards in time, or in which gifted individuals see spiritual truths otherwise imperceptible to them. How can we explain this ? It is suggested that our soul or personality, that something which is above our animal life, is then in a plane of spiritual existence akin to physical death, when we are nearer to God. In poetic imagery, ' sleep is twin brother to death ' ; and our souls are for the time being released from the bondage of the flesh. God takes them for the time being. If, as some do, we are to die peacefully in sleep, our soul does not come to the physical body, and the latter decays and dies. If we have still some period of life to fulfil according to God's decree, our soul comes back to the body and we resume our functions in this life." [13]

And we function our daily works of life under struggles and difficulties. The Qurān says, 'Verily we have created man with toil and struggle.[14] It is for the purpose that we may know our Reality which is being felt every night in our sound sleep, but the desires of the world do not give us opportunity to think over the matter, and under the pressure of troubles and difficulties, we are suffering deaths throughout our life, the 'ārif (the knower of God) being always excepted; for, though he is with the body, he is enjoying the Eternal Bliss. Again, the Qurān says, " what! did you think that we had created you in vain, and that you shall not be returned to us?"[15] Our life is for the purpose that we may know the Reality of life which is the realization of God. Rūmī says, "The creation of the world is for the purpose of (Divine) Manifestation, so that the Treasure of Knowledges may not remain hidden ; God said, 'I was a hidden Treasure,'[16] Listen (to it) ; be not lost to your Essence (which is the

[13] Yusuf Ali, The Holy Qurān, p. 1250.
[14] Chap. 90; 4.
[15] Chap. 23; 115.
[16] It refers to the Tradition (Hadīs-i-Qudsī)—'I (God) was a hidden Treasure and I desired to be known, so I created the Universe, in order that I may be known.'

hidden Treasure), and become manifest (by sacrificing your carnal desires)"[17].

In the Qurān it is found that the fall of Adam was for his attachment towards the forbidden fruit, the symbol of sin and ignorance, and the moment he understood his separation from the presence of God, he repented of his action, which repentance was the cause of reaching him again to God after a time; but as Satan was not aware of his own fault, he remained accursed till the day of Resurrection. Adam was to be the 'vice-gerent' of God in the earth. But how can He manifest Himself? For nothing can be manifested in the world without having contraries side by side. The angels represent the good qualities; they understand the Essence of God, but they cannot be produced before, as they lack the contrary qualities or the natures of man; hence their inability to represent the 'vice-gerent' of God in the earth. Adam was then taught the 'names of things,' *i.e.*, the real natures of everything, by learning which he was raised higher than the angels—which was of the status of God; but this man-God should be revealed to the earth. God created in him passion which in its subdued state represents his wife, and They together are to enjoy the Bliss of the Garden, where Adam was living before his fallen state. And the moment there arose in him the desire for the forbidden fruit, which is only the uncontrolling state of his passion, symbolized by Satan, he fell from his state of man-God. The next moment Adam repented of his falling state, and with this again begins his rising to the former state of Bliss. Every life, in short, is the fallen state of Adam where he became unmindful of the presence of God, and the moment he became aware of this situation, he is developing to his former state, which is the goal of every human being, and which every one will ultimately realize. The moment of realization has been symbolized by the Day of Resurrection where Satan will have no power over the human mind and will die automatically.

Thus birth and death are only the apparent change of the Real Identity. The One is always the same, but we do not understand it as we are under the influences of Satan which are the conflicts of minds, and these conflicts take shapes for the necessary fulfilment of the desires. As Rūmī says in his Fīhimā Fīhi, "Form is of great importance; indeed nothing can be done without the co-partnership of form

[17] Masnavi, Vol. IV, 3028-29.

and essence. You may sow a seed without its husk, but it will not grow up; sow it with its husk and it will become a big tree, from this point of view the body is fundamental and necessary for the attainment of the Divine purpose." The seed has been compared to the so many desires of man, which cannot develop in their ways without the required bodies which are like the husk of a seed. These desires must be overcome, through repentance after repentance, and then the perfect man will reach a stage where he is higher than the angels who have no desires to overcome. As Rūmī declares in his Masnavī, "God's mercy preceded His Wrath, in order that the existence itself may take a shape. For the reason that without pleasure flesh and skin do not grow, and if they do not grow, what the love of the Friend will enjoy"[18]? That is, the Divine Love will develop in us, when we shall mortify our carnal desires in us.

Therefore, the sorrows and sufferings must follow our existence. Our poet says, "All these sufferings that lie in our breasts are from the vapour and dust of our existence and their winds (*i.e.*, arise from our carnal desires). This is such and that is such is from our idle desires (which give us sufferings). But these uprooting sufferings (again) serve as a Scythe to us. Know that every suffering is a piece of death. (Therefore), repel that part of death, if there is any means. And if you cannot avoid that part of death, it is sure that the whole of it will pour upon your head."[19] Sorrows and sufferings give us a hint of being repented of our past actions, and if we be not careful of them, we are doomed to suffer. They are really blessings in disguise. "Sufferings are really a great message from death—do not turn your face from his messenger, O foolish one. If you can think that part of death (*i.e.*, sorrows and sufferings) as of advantage to you, God will make the whole also sweet. For whoever lives sweetly, dies bitterly, (and) whoever serves his body, does not save his soul."[19]

As with Adam repentance was the cause of rising from his fallen state, so with every human being repentance brings every soul to the presence of God, and henceforward he steps forward to gradual development. In the Masnavi we find, " Life without repentance is all ruining of the spirit—to be absent from God is the clear death. Both life and death are sweet with the presence of God. Without

[18] Masnavi, Vol. III; 4167-8.
[19] *Ibid*, Vol. I, 2296 *et seq.*

God the water of life is fire (*i.e.*, is in the state of Satān, who gradually falls down and is, consequently, accursed). Moreover, it was the effect of (Divine) curse that any one seeks after long life before (His) presence. To seek from God anything besides God, is the supposition of gain, but it is total loss . . . . Whoever makes this world the water of life, death comes to him sooner than others[20]. (But) one who hankers after the spiritual world, finds this world also to be full of treasure.

. . . . What is this body? (God shapes) it with harmonious cohesion of the patched garments (*i.e.*, the different elements) for transmutation of essences and all embracing elixir. On the day when you came into existence, you were either fire, or air, or earth. If you had remained in that condition everlastingly, how should this present development have been reached to you? The Transmuter (God) did not leave you in your first state of existence; He established a better state of existence in the place of that (former one). And so on till a hundred thousand states of existences, one after another, the successive one being always better than the preceding one . . . . you have gained these (successive) lives from (successive) deaths. (Therefore), why have you turned your face from dying to Him? What loss had you in these deaths, that you have clung to this (earthly) life, O you, addicted to passions?"[21].

The body, then, is only a garment which takes to its new form, when it is required for the spirit to have a new shape. And Rūmī Says, 'you know that the body is like garment. Go, seek the wearer of the garment (*i.e.*, the Divine man in you), do not lick a garment (*i.e.*, do not be attached to the bodily passions)'.

Tā badānī ki tan āmad chūn libās
Rau bajū lābis libāsī rā matīs.

The poet, then, tries to show how the spirit fashions the body, "When God gives a spirit to the embryo in the womb, He puts in its (spirits') temperament the attraction of (different) elements. Through food it draws its elements together and weaves the warp and woof of its body. Till the age of forty years, God will have made it desirous of drawing elements together in process of growth. He taught the

[20] *Cf.* Hadīs "Beware of associating with "the dead"; on being asked what he meant by "the dead', the Prophet replied, "the rich"; or according to another version, "the worldly".

[21] Vol. V; edited by Nicholson, Pt. 5, p. 50-51.

spirit to draw elements together—How should the Incomparable king (God) know not the attraction of (drawing) elements together.[22]

The origin of man from its stage of the element to the highest stage of realization in manhood turned to Divinity has been nicely described by our poet in his fourth volume of the Masnavī: First he came into the region of inorganic state, and from this state he passed into the Vegetable state (*i.e.*, the state of growth). For many years he lived into this state, and became forgetful of the inorganic state because of the opposition (between the two). From the Vegetable state when he passed into the animal state, he became forgetful of his former state, except the inclination which he has towards that, specially in the season of spring and sweet herbs.... Again, the creator, whom you all know, was leading him from the animal state to humanity. Thus, did he advance from region to region, till he has now become intelligent, wise and mighty. Of his first stages, he has no remembrance, and from this stage (of humanity) also change must come to him, so that he may escape from this stage, full of greed and self-interest, and realize hundred thousand stages, most wonderful. Though he fell asleep (died) and became forgetful of the past, how should they (the different tendencies of his former state) leave him in that state of self-forgetfulness? From that sleep (death) they will bring him back again to wakefulness (Resurrection), so that he may mock at this (present) state,—Saying, 'what was that sorrow that I was suffering in my sleep?—How did I forget the real states (of mine which is Divinity)? How did I not know that sorrow and disease is the effect of sleep (dream)' and it is all false and phantasy ?'[23]

Mystically, Resurrection is the state of Realization. And that can be gained only when all tendencies of the spirit are absorbed in the thought of God, and the conceptions of good and evil have no separate existences. He feels the existence of Good, who is All good, everywhere, and comes to a same state with God, where he exclaims out, 'an al Haq, (I am God). Accordingly, the Sūfis compare the world to a dreaming state. In sleep we see dreams that have no reality. In the same way before realizing our real states, we suffer in the conflicts of the thoughts of this world, that we think to be real; but after realizing God, we shall find that they have no reality.

[22] Masnavī, Vol. III; Edited by R. A. Nicholson, Pt : 3, p. 101.
[23] *Ibid*, pp. 493-4.

While continuing his description of the various stages of man, our poet says, "Thus, the world is like the sleeper's dream; the sleeper thinks that it is really lasting. When all on a sudden there will appear the dawn of death (*i.e*, the death of all conflicts of thoughts with the realization of God), he will be delivered from the darkness of idle imaginations and false thoughts. He will laugh at his sorrows, when he realises his permanent abode and dwelling place."

According to the Holy Qurān there are three states of a man's life—his life in this world, his life in Barzakh, and the great manifestation of all spiritual realities that will take place on the Day of Resurrection; the state of Barzakh being the intermediate state in which the soul lives after death till the greater Resurrection.[24] But to the Sūfis these are not the only states which a life experiences, but it begins much earlier and experiences many more stages within the life of a man even in its stage of humanity. In short, the first stage may be compared to a life which is an admixture of the conflicts of good and evil, where sometimes he thinks this one to be good, and that one to be bad, and on the next moments he thinks contrarywise. In this way life goes on till he comes to a state where he becomes definite about his way of thinking, and thinks something to be good, and it is good to him for all time, and by this certainty of idea, he makes other things to be bad for all time to come. But to God there is no relative good or evil, and He is, without finding any other word to express the essence of God (which is undescribable for any conception is begotten of qualities and limitation: God is not begotten, He is lam yūlad'), All Good. We are to reach that state which is beyond all good and evil, and that is Realization. Really, we are like so many waves of the Sea. Rūmī says, 'Both (good and evil) dash against each other from beneath and top, waves on waves, like the water of the Sea; the appearance of opposition (arising) from the narrow body (of the waves) is due to the intermingling of the lives (of waves) at peace and in war. The waves of peace dash against each other and root up hatred and jealousy from the breasts. The waves of war, in another form, turn the loves (good qualities of men) upside down. Love is attracting the bitter ones to the sweet and wrath is carrying the sweet ones to bitterness, for the origin of love is righteouoness and how should be the bitter ones be mixed with sweetness ?[25]

[24] The Holy Qurān, translated by Muhammad Ali, p. 692.
[25] Ma'snavi, ed. R. A. Nicholson, pt. 1, p. 159.

Again, "In this world there are the bitter sea and the sweet sea—between them is a barrier (Barzakh, Q. 53 ; 19) which they do not seek to cross. Know that both these flow from the same origin. Pass on from them both—(and) advance to its origin. Without the touch-stone you will not be able to know by your understanding the distinction between the pure gold and the adulterated gold." [26] The conception of good and evil is not possible to view clearly before the realization of God. In short, man's life may be divided into three stages, animality, rationality and divinity. Animality is that state where he is conscious of his sorrows and pleasures; but he cannot rationalize between them ; rationality or humanity is the state where one distinguishes between good and evil ; and divinity is the state where he sees all good; it is the unity of everything with God.

We do not like to conuern ourselves with the 're-birth' of man (tanāsukh) regarding which there is diversity of opinion. But this much is certain that before reaching the highest stage, one is to experience existence and existence, till he reaches that highest stage. The stages after reaching the humanity may be compared to the foot prints of the ocean, which are not visible, and the stages preceding the humanity are obviously clear to us. Lives and deaths are only the so many halting places in our journey to the eternal ; in other words, so many 'foot prints' where one stands, and gives an indication of his existence. How excellently the poet clears up this idea in his fifth volume of the Masnavī ; you advanced from inanimateness towards growth and from growth towards life and its troubles. Again torwards reason and its goodly rationalities, and thence (you are) free from these five (senses) and six (directions). These foot prints are up to the shore of the sea ; after that (your) foot prints disappear in the sea. Because, from (divine) precaution, the resting places on the dryland are (like) the villages, the dwellings and caravansarys ; (on the contrary) resting places of the sea at the time of their waves (which are) their lives, have no floor or roof during the haltage. These stages have no (visible) elevation—these resting places have heither sign nor name. Between these resting places there are hundreds of such stages as from the (stage of) growth to essential spirit (of

[26] *Ibid*, p. 20.

humanity). You have seen this life (got) from (previous) deaths; (therefore), how are you attached to this life of the body? [27]

The divine man cannot be described by words—it is a state which should be realized. Rūmī says, "In your essence you are neither this nor that. O you, who are greater than all imagin ations and more than more."—Tu nih īn bāshī nihān dar dzāt-i-khwish Ayi fazūn āz wahamhā waz bīsh bīsh.

To the divine man there shines a world where there is no conflicts it is the vast sea without any visible wave, always calm and quiet, though to others the waves are seemingly opposite to one another, "for that world is like a saltmine; whoever has reach ed there (the state of realization of God) has become free from dyeing (with various colours).—Look at earth; it makes many coloured (diverse) mankind to be of one colour in their granes. This is the saltmine for visible bodies; but the saltmine for ideal (supersensible) things is quite different. The saltmine for ideal things is spiritual, (and consequently) it is in the state of newness from eternity without beginning to eternity, without end. This (bodily or visible) newness has oldness as its opposite; but that (spiritual) newness (or the newness of the world of reality) is without opposite or like or number. Such that by the polishing of the light of Muhammad thousands of darkness became lighted. Jews, Politheists, Christians and Magians all were made of one colour by that Alp ulugh (a great hero, meaning the prophet Muhammad). A hundred thousand shadows, long and short (fancy religious diverse views of different nations) became one in the light of that sun of mystery (prophet Muhammad). Neither a long, nor a short, nor a wide shadow remained, but everyone was absorbed in the sun. But the one colourness that is everywhere at the time of Resurrection (or at the time of realization) is made clear and expressed over the (conflicts of) good and evil." [28]

[27] *Ibid*, pt. 5, p. 52.
[28] Vol. VI; edition of Nicholson, pt. 5, p. 379.

# Round the World

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**India before U. N. O.**

The Indian delegation to the United Nations Assembly which has been in session in New York for the last one month was particularly chosen to present the Indian case against South Africa. Mrs. Pandit who during her visit to the United States in 1945 proved a surprisingly effective spokesman for India was appointed very fittingly the leader of the delegation. Her long association with Indian public life, her experience of Indian administration as a Minister and her popularity in the country in which the Assembly was holding its session marked her out for this position of responsibility. Sir Maharaj Singh who had been for several years the Agent of the Government of India in South Africa and acquired in that capacity considerable first hand experience of the conditions of South African life and activity was appropriately included in the delegation. Mr. Justice Chagla who is another delegate is not only well known for his excellent legal acumen but also as a clear persuasive speaker.

The policy of racialism persued in South Africa against the Indian settlers in that country for nearly six decades had its culmination in the passing by the Union Legislature of the Asiatic Land Tenure and Indian Representation Act. It provides that from now on these Indian settlers will be entitled to leave only in certain specified areas and will not be allowed to purchase land either from the European citizens or the local African people outside these localities. In other words life represented by the Jewish Ghetto against which there has been so continued and so successful a protest all over the world will be henceforward the lot of the Indian immigrants in South Africa. Secondly, the Act provides that in the Union Legislature these Indian setlers would be represented by three Europeans. No Indian immigrant would be allowed to be elected. Both these provisions have been inserted in the Act by way of formally declaring the inferiority of the Indians as a race and by way of emphasising the fact that South Africa was a white country to be ruled only by, and in the interests of, the white people. It should be known also that besides the disabilities referred to above, the Indian settlers have many other disabilities heaped upon them in practice. For instance educational facilities, particularly facilities of higher education though amply provided to the European boys and girls, are practically denied to the Indian settlers.

This avowed policy of racialism is not only insulting and therefore wholly unacceptable to the Government and people of India but it represents an imitation of the Nazi theory and practice against which most of the countries now assembled under the auspices of the U. N. O. happened to fight barely a year ago. It was on this account expected that the United Nations Organisation which was set up to make the revival of Hitlerism impossible in the world would unhesitatingly issue a clear verdict in this clear case and compel South Africa to go back upon the policy of racialism

which it has pursued so far and which, if not killed now, may be the origin of a racial war in the future. Unfortunately some of the important members of the U. N. O. have reasons of their own for not going against South Africa and they accordingly chose the legalistic way of looking at the problem.

Mrs. Pandit in opening her indictment against South Africa took her stand not merely on the violation by that country of definite agreements between the South African and Indian Governments but also on the clear provisions of several Articles of the United Nations Charter. It should be known in this connection that one of the objects with which in view the U. N. O. was established was "to reaffirm faith in fundamental human rights, in the dignity and worth of the human person....." In section 3 of Article 1, it was further laid down that one of the purposes of the United Nations was "to achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion". If this was a clear provision of the Charter, could not Mrs Pandit ask the United Nations very pointedly as to what they were going to do to protect this Charter from flagrant violation by one among them? The policy of South Africa as embodied in the "Ghetto Act" was certainly an open and avowed violation of this Article of the Charter. In the face of this the Organisation could remain silent only at the cost of its own health and usefulness. Then again Article 55 povides "with a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language or religion." Further in Article 56 it is laid down "All Members pledge themselves to take joint and separate action in co-operation with the Organisation for the achievement of the purposes set forth in Article 55." The appeal of Mrs. Pandit to the United Nations was that they should take this "joint or separate action" in pursuance of this Article of their Charter. There is also the provision, in section 2, Article 62, for the Economic and Social Council to exercise jurisdiction in a matter which arises out of such a situation as the passing of the Ghetto Act by the South African Legislature happens to create. Lastly, it should be known that there has been a prolonged dispute between two members of the U. N. O. namely India and South Africa — a dispute which has already resulted in the suspension by India of all trade relations with South Africa. In view of this the U. N. O. may take congnisance of the case as referred by India under Articles 33 and 34.

Field Marshal Smuts who personally led the South African Delegation made a lengthy rejoinder against the indictment of Mrs. Pandit. But what he said in self-defence about the policy of segregation in respect of residence and of exclusion in respect of parliamentary representation was puerile and unworthy of the great reputation he has built up as an elder statesman. So if the merits of the case were alone the issue, he would have little chance of support anywhere. He however took his stand on section 7, Article 2 of the Charter, which provides: "Nothing contained in the present Charter shall authorise the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any State or shall require the Members to submit such matters to settlement under the present Charter....." His contention was that all that the South African Government has done so far in regard to the Indian immigrants was a matter of only domestic jurisdiction. The only thing to be enquired into was whether there was any definite treaty or agreement between two international persons, namely India and South Africa and whether the policy of the South African Government as embodied in the Ghetto Act was a violation of such an agreement.

In the light of the provisions of other Articles in the Charter which Mrs. Pandit and her colleagues cited in support of their invocation of U. N. O's intervention the stand of the South African Premier on section 7 of Article 2 was desperate, But his advantage was that some of the other Members of the United Nations had not an open mind in respect of the issues involved.

In fact, a few of the very prominent Members had also in their country problems which South Africa has created for itself. Consequently they were keen on concentrating on the question whether there was any agreement between India and South Africa and whether the Ghetto Act was a violation of that agreement. By narrowing the issue to this they would have opportunity of referring the matter to the Court of International Justice, and of avoiding the immediate exercise of any jurisdiction by the U. N. O. It is fortunate that this attempt on their part was foiled in the joint meeting of the Political and Legal Committees of the U. N. O. A resolution sponsored by France and Mexico was here adopted. It is not certain at the time of writing whether this decision would be endorsed in the full session of the Assembly. But still it represents a moral Victory for India.

In any event although the Government of India may fail ultimately to get the Ghetto Act repealed and the policy of the South African Government reversed through the operation of the U. N. O. machinery, it will have the satisfaction of not only having publicised on an international forum the Nazi policy of the Government of a British Dominion but also of having recognised who are friends and who are not. Mrs. Pandit, as the leader of

the Indian Delegation, has publicly thanked the Russian Delegation for its befriending India in regard to a still more fundamental matter. In connection with her presentation of the case against South Africa also, she has received uniform support from the U. S. S. R. and China and thanks of the Indian people and Government are due to them as also to France, Mexico and Poland. It would have been a matter of congratulation if Britain whose relations with India have been so intimate and which has so far regarded itself as the guardian of Indian interests both in India and outside could give her support to this country. It would not have come as a shock if at least the delegate of the British Labour Government, *e. g.*, Sir. Hartley Shawcross took up an attitude of neutrality. But he sided wholly with South Africa. This should be an eye opener and may be a valid argument for India having little interest in the British Commonwealth, which is a white concern.

**Abolition of Zamindaries**

Zamindars have been for centuries an essential and even a pivotal factor of the land system of a large portion of India including the provinces of Bengal, Bihar and U. P.. In the first two provinces and in some areas of U. P. again the zamindars have had their position secure under what is known as the Permanent Settlement. It could be said at one time that they were really the owners of the land which was included in their estate while the tenants were only temporary lessees enjoying the land at the discretion of the owners on condition of paying a rent prescribed either by tradition or by contract. Zamindars as owners had to pay a fixed revenue to the Government but otherwise had full liberty to do whatever they chose with their land. Gradually, however, tenancy legislations changed the relationship between tenants and zamindars. Most important of such legislations in Bengal are the Tenancy Act of 1885, and its Amendments of 1928 and 1938. The last Amendment, adopted by the first legislature elected under the Act of 1935, was almost of a revolutionary character in this that henceforward a tenant could transfer his holding to any person without any reference to the zamindar. All that was necessary was that an information was to be given through the Registration Office to the zamindar that a particular holding tenanted so far by a particular person would henceforward be tenanted by so and so. The right of pre-emption which the zamindars had still left to them under the Act of 1928 was abolished. So they would not have any choice henceforward in the choice of their tenants. In other words the ownership of land was practically and theoretically transferred by the Amendment Act of 1938 to the tenants, subject only to the payment of rent to the zamindars. One more step and the revolution in the land system becomes complete. The zamindars who were at one time the owners of the land and who are to-day only the rent-receiversare now to be deprived of this last privilege.

The Land Revenue Commission which was appointed in 1938 and which was presided over by Sir Francis Floud submitted its report in 1940 and recommended therein that Permanent Settlement should go, the zamindaries should be abolished on payment of compensation and the tenants should be brought into direct relationship with the Government. The report and the recommendations contained therein were studied on behalf of the Government of Bengal by Sir Walter Gurner and the opinion he formed of the recommendations after a close study was circularised among the members of the Legislature. So far however no action has been taken particularly because of the exigencies of war. But it is now understood that a bill has already been framed by the Revenue Department and that it is being considered by a Cabinet Committee. It is not unlikely that in the budget session this bill will be introduced in the Assembly. So it seems Permanent Settlement inaugurated by a Regulation of the Government of Lord Cornwallis in 1793 will be done away with by an Act passed in 1947. It may of course be asked if the aboilition of the zamindary system will be of much benefit to the province. So far as the tenants are concerned, they will be where they are. They are now free to do what they like with their land provided only they pay rent to the zamindars. In the new dispensation also they will have the same position, only the rent being paid possibly at an enhanced rate to the Government. Those whose holdings are large will not have them dismembered by the contemplated Act. The Legislature, it should be remembered, is anti-zamindar but not anti-jotdar. Rather it reflects to a great extent jotdar point of view. So the kulaks will be where they are and the landless or semi-landless cannot expect much of an improvement in their status. Fragmentation of holdings which is such a bane of Bengal's agricultural life is unlikely to be stopped and consolidation of holdings without which agriculture may hardly develop and grow-more-food campaign can hardly succed is not likely to be promoted. So from these points of view the abolition of Permanent Settlement may not improve matters very much.

But there is one aspect in which this abolition will have a far reaching effect. Zamindars belong mostly to the minority community in this province and the abolition of Permanent Settlement will affect the inter-communal economic balance in Bengal very adversely against the minority community. In the United Provinces the zamindars are more evenly distributed among the two major communities and the abolition of the zamindari system will affect one community as much as the other. But even there the members of minority communiy have declared themselves against this proposed abolition. Things are however moving as fast there as in Bengal. A Committee consisting of members of the Legislature and Zamindars has been constituted in U. P. to make recommendations as to the ways and means of abolition.

# Reviews and Notices of Books

**The Consequences of Pakistan**—By K. L. Gauba, Member of the Indian Legislative Assembly (1934-37), Member, Punjab Legislative Assembly (1937-41). Pp. 293. Published by Lion Press, Lahore. Price Rs. 6-

Mr. Gauba whose *Uncle Sham*, *His Highness*, *Verdict on England*, etc., have been read with avidity and interest by most of their readers has in this book, discussed the Pakistan problem in his own inimitably vigorous and original way, a way it may be added which while not likely to please either the orthodox Hindu or the equally orthodox Muslim, the confirmed Muslim Leaguer or the obstinate Congressman must be welcomed by all who attempt to preserve a dispassionate outlook in regard to probably the most vexatious of our political problems as well as by numerous men of good will who, as yet unorganised and therefore unable to shape political opinion, would gladly see a solution satisfactory to all parties. And he should congratulate himself if his striking contribution to the discussion centering round Pakistan is even remotely helpful in making people pause and think before entering the fray.

The first chapter is devoted to proving that may be unpalatable fact that Pakistan is born of the social exclusiveness of the Hindu and he would indeed be hardy who would care to challenge the correctness of the view set forth in it. The next three chapters describe the birth of the idea, its promulgation by Choudhury Rahmat Ali, together with amendments of Mr. Ali's scheme and the acceptance of the Pakistan view by the Muslim League. The next seven chapters are devoted to pointing out the practical difficulties which stand in the way of creating Pakistan by showing that the boundaries of Pakistan so far as the Punjab is concerned, can be settled by war only, how Hyderabad logically must have a Hindu Rajah and that its defence, financial and economic problems would be almost incapable of solution. The conclusion at which Mr. Gauba arrives as given in the twelfth chapter of his book is that "civil war seems implict in Pakistan". In the opening part of the last chapter the author draws attention to some funny results which must follow the establishment of Pakistan but these constitute merely an introduction to a more serious, and, it may be added, to a more realistic attitude. The references to the quality of Mr. Jinnah's past leadership are trenchant but true. He ends his book as follows:

"If human understanding can mean anything, Pakistan appears to be a dream far-fetched from the domains of reality. The true Islamic State

will not and cannot be Pakistan. Pakistan will divide India, it will alienate the sons of the soil from the land of their birth; it will create an effete and defenceless State, the envy of its neighbours and of foreign exploiters. It will enslave the Muslim community to foreign capitalists for a century, it will drive prosperity away from the Punjab countryside. It will spell unemployment for the martial races of the Punjab. It will put the clock back by a hundred years.

"These are some of the consequences of Pakistan. There may be others".

We feel sure that Mr. Gauba would have won the gratitude of non-Muslim Bengal and Assam if he had dealt with the problem of Eastern Pakistan in the same detailed way as in the case of Western Pakistan. We suggest that he will keep this in mind when the next edition is brought out. This will give a survey of the whole problem in a more complete way and add much to the value of an already valuable book.

The number of misprints jar on the reader in an otherwise well printed and attractively bound book. Those which have come under the notice of the reviewer are to be found on pages 20, 24, 25, 141, 149 and 252.

**I.N.A. and the August Revolution**—By M. N. Roy with appendices by Kautilya. Published by the Renaissance Publishers, Post Box 580, Calcutta. Pp. 107. Price Rs. 2.

Mr. M. N. Roy has in this book given expression to opinions entertained by many Indians who tried to view public events in a detached manner in the days when the doings of the I.N.A. were occupying the attention and winning the admiration of those who had succumbed to the romance and the glamour which had come to be associated with it. At that time, in Bengal at least, there was only one paper, an Anglo-Indian one which was pointing out that the I.N.A. was being utilised by the Japanese for their own purposes and that if these were achieved through its instrumentality, there was every chance of India being drawn into the "Asiatic Co-prosperity sphere" of Japan. These views were criticised unmercifully and it was even suggested that they were due to a desire to belittle the military performances of the I.N.A. Few indeed were the Indians who were prepared to court unpopularity by speaking out the truth as they saw it. Mr. Roy has in this book more than maintained his reputation for clear thinking and bold speaking.

Mr. Roy is cruelly logical when he points out that the August disturbances, for every one will not agree with him in characterising what at most were sporadic, unplanned and localised disorders as revolution, provided they had extended from east and north-east Bengal to at least western Bihar, would have facilitated Japanese plans of invasion. But there is no sufficiently convincing proof of the existence of well-concerted

plans made in advance by the Congress organisation itself for the purpose of substituting Japanese for British Government. On the other hand, it may be urged that as the Congress had invested Mahatma Gandhi with the sole responsibility of launching, let us admit, a non-violent rule, his arrest and detention before he could take any step in this direction is clear proof that the Congress, as an organisation, cannot be held responsible for what happened. This becomes clear when we remember that the British author of the well-known propaganda pamphlet *Congress Responsibility for the Disturbances* was unable to put forward any convincing proof that Mahatma Gandhi or anyone entrusted with the task of leading the movement contemplated, encouraged or instigated the violence and sabotage which took place in the later months of 1942 and the earlier months of 1943.

At the same time, Mr. Roy is perfectly correct when he refers to the Pro-Japanese feeling so rampant in those days. One explanation for this may be the desire to worship the rising sun, another that it was the result of the work done by the Japanese secret service, and a third the foolish urge to somehow get rid of British rule in the hope that India might get a better deal from Japan; the real nature of which was not then known as clearly as today. It is possible to explain the disturbances as being the work of Japan's Fifth Column, of honest imbeciles tired of British rule and of the lawless elements always ready to take advantage of social and political turmoil for their own ends.

The August disturbances may be accounted for in the above ways is also recognised by the author but he has failed to convince the reviewer about any closeness of connection between the August disturbances and the I.N.A. activities. But he is undoubtedly right when he says that in judging such happenings critically can never afford to forget that misguided honesty may lead to as much mischief as conscious wickedness.

H. C. MOOKERJEE.

**The Indian Contribution to English Literature**—By K. R. Srinivasa Iyengar (Karnatak Publishing House, Rs. 6).

At pp. 223-24 of this book, we find the following passage:—

"In India . . . Professors of English almost as a rule lack both the facilities and the inclination to attempt serious literary criticism . . Indeed, even those Professors of English who are obliged to do some sort of critical work before they obtain their doctorate degrees, more often than not relapse into somnolent inactivity afterwards. This is due to an understandable feeling of defeatism that the best they can do is very likely to look insignificant by the side of the works of criticism that are being produced in the British and American Universities. And yet one fervently hopes that there will be less of this effeminate timidity and inaction in the future".

The author is himself a professor and the possessor of a doctorate. His attempted crusade against his colleagues' "effeminate timidity" certainly deserves commendation, but its wisdom is questionable.

We do not propose to quarrel with the author's designation of "Indo-Anglican" for "the contribution of Indians to English literature". We admire a great deal his conscientious industry. We do not deny that he is capable of discrimination, but for Heaven knows what reason, he has chosen to write an unequal, catalogic, sometimes, in desperation, a shorthand survey of nearly all that has been written, especially lately, by Indians in the English language. It will be a useful book of reference, but as "serious literary criticism" it fails of its purpose.

That well-known reviewer in "Hindu", "K. S. . . ." once wrote that "most Indo-Anglican poetry is born dead and deserves and is doomed to prompt and perpetual damnation." Dr. Iyengar, at page 237, dismisses the *obiter* as "pompous and pontifical", but nowhere discusses the point involved. At page 194, he quotes, obviously with approval, a recent Indian practitioner of English writing: " We cannot write like the English. We should not. We cannot write only as Indians. . . Our method of expression, therefore, has to be a dialect which will some day prove to be as distinctive and colourful as the Irish or American". Again, however, Dr. Iyengar shirks discussion of this daring proposition.

In his effort to be a scrupulous recorder of achievement, however indifferent, he has failed to do justice to the few authentic voices he has found—Toru Dutt, G. K. Chettier, Manmohan Ghose and one or two others. For Sri Aurobindo as philosopher-poet he has unbounded admiration; that perhaps is the reason for his wasting valuable space on several of his disciples. He is, of course, entitled to his opinion, but it is more than doubtful if Aurobindo's poetry *as poetry* will live for any length of time. Is it literary judgment or respect for political distinction that makes Dr. Iyengar apostrophise Mrs. Naidu with the words: "Your music on a nation's tongue"? If paternal prosperity is no passport to the heights of poetry, can Bharati Sarabhai be called a "front-rank poetess"? What, really, is the point except the cataloguing one—of including professors and "more professors" in the list of "Indo-Anglican" poets? To spare professorial feeling, we forbear to quote a professorial performance which the author says (at p. 135) is "a fine little poem".

Dr. Iyengar has made, truly, a pioneer attempt, but it is very unequal. How is it that Karaka gets more space than Mulk Raj Anand? How is it that " orators " figure in this book, but not Lalmohan Ghose? How is it that Gandhiji's "autobiography" translated by someone else is referred to in some little detail, but he is merely listed among "journalists", while in *Young India* and elsewhere he has written, in English, what is, on any

computation, *real* literature? How is it that there is no serious discussion of the style of *writing* adopted by nineteenth-century "Anglicists", and by Rabindranath Tagore and Aurobindo Ghose, Radhakrishnan and Jawaharlal Nehru? Of course, they are all mentioned and encomia duly handed to them in profusion. But that is not enough, not by a long chalk.

For all that, however, Dr. Iyengar has much talent and capacity for dour, but necessary, research. That is why he raised expectations which, unfortunately in this book, he has not fulfilled.

HIRENDRANATH MOOKERJEE.

# Ourselves

## Agenda for Inter-Asian Relations Conference

There is a proposal to hold in this cold weather an Inter-Asian Relations Conference in some suitable place in India. The University was approached to make some suggestions as to the agenda of this Conference. The Syndicate appointed a Committee to consider this matter. It consisted of:—

1. The Vice-Chancellor
2. Dr. P. N. Banerjea
3. Dr. P. C. Mitter
4. Professor K. P. Chattopadhay
5. Mr. A. N. Chatterji
6. Professor Niharranjan Ray

* * * *

## Delegate to the All-India Educational Conference

The 22nd session of the All-India Educational Conference was held at Trivandrum in Christmas week. On invitation from the Honorary Secretary of the All-India Fedaration of Educational Associations, the University deputed Dr. P. N. Banerjea, M.A., D.Sc. (Lond.), Barrister-at-Law, to attend the Conference.

* * * *

## Professor B. C. Guha

Dr. B. C. Guha, Sir Rashbehary Ghose Professor of Applied Chemistry of this University, was with the permission of the University associated for six months with the United Nations Educational Scientific and Cultural Organisation. It should be noted that Professor Guha was from July 1944 on deputation to the Department of Food Government of India as Chief Technical Adviser.

* * * *

## Academic Conferences

Various academic conferences were held during Christmas week—History Congress at Patna, Indian Philosophical Congress and Indian Political Science Conference at Delhi. In all these Conferences teachers of this University took an important part. Dr. J. N. Banerjee and Dr. Rashbehari Das were sectional Presidents in the History Congress and the Philosophical Congress respectively and Professor B. M. Barua opened the symposium on contributions of Buddhism to Indian thought in the latter,

9—1600P—XI

# Official Notifications, University of Calcutta

## Orders by the Vice-Chancellor and Syndicate of the University of Calcutta

UNIVERSITY OF CALCUTTA

NOTICE

Senate House, the 29th November, 1946

The following orders have been passed with regard to the cases of some candidates who had recourse to unfair means at the last I.Sc. Examination :—

(*i*) The examination of the undermentioned candidates is cancelled and they are debarred from appearing at any examination of the University in 1947 and 1948 :—

1. Debkanta Bhattacharyya, Cal. 3297, Regd. No. 1960 of 1943-44, Bangabasi College.
2. Dwipendranath Nandi, Kush. 21, Regd, No. 11623 of 1944-45, City College, Kushtia Branch.
3. Sudhirkumar Bhaumik, Pab. 9, Regd. No. 7501 of 1944-45, Pabna Edward College.

(*ii*) The examination of the undermentioned candidates is cancelled and they are debarred from appearing at any examination of the University in 1947 :—

4. Anilkumar Das, Ber. 189, Regd. No. 5227 of 1944-45, Berhampore K. N. College,
5. S. A. Bari A. T., Far 47, Regd. No. 11609 of 1943-44, Faridpur Rajendra College.
6. Kalipraphulla Rāy, Pab. N. 16, Regd. No. 7184 of 1943-44, Non-Collegiate student, Pabna Edward College.

(*iii*) The examination of the undermentioned candidates is cancelled :—

7. Sadananda Samanta, Birb. 24, Regd. No. 10201 of 1944-45, Vidyasagar College (Suri Branch).
8. Kamalendu Dasgupta, Birb. 36, Regd. No. 10146 of 1944-45, Vidyasagar College (Suri Branch).
9. Radhakanta Sarkar, Birb. 38, Regd. No. 10207 of 1944-45, Vidyasagar College (Suri Branch).
10. Madhab Chakrabarti, Birb. N. 6, Regd. No. 10126, of 1945-46, Non-Collegiate student, Vidyasagar College (Suri Branch).
11. Kamalkrishna Ray,—Birb. N. 10, Regd. No. 6160 of 1945-46, Non-Collegiate Student, Vidyasagar College (Suri Branch).
12. Sekhar Sen, Cal. 236, Regd. No. 822 of 1943-44, Ripon College.
13. Sankariprasad Chandra, Cal. 237, Regd. No 8732 of 1944-45, Ripon College.
14. Abanimohan Das, Cal. 239, Regd. No. 8325 of 1944-45, Ripon College.
15. Byomkes Saha, Cal. 240. Regd. No. 8548 of 1944-45, Ripon College.
16. Kamalakanta Bandyopadhyay, Cal. 241, Regd. No. 15333 of 1944-45, Ripon College.
17. Nisakar Pal, Cal. 273, Regd. No. 8857 of 1944-45, Ripon College.
18. Nityananda Pollay, Cal. 275, Regd. No. 8860 of 1944-45, Ripon College.
19. Subhaschandra Ghosh, Cal. 281, Regd. No. 8398 of 1944-45, Ripon College.
20. Birendrakisor Nandi, Cal. 351, Regd. No. 4226 of 1940-41, Ripon College.
21. Anilkumar Das, Cal. 352, Regd. No. 8756 of 1944-45, Ripon College.
22. Asok Chattopadhyay, Cal. 353, Regd. No. 8734 of 1944-45, Ripon College.
23. Saumyendralal Ray, Cal. 509. Regd. No. 8538 of 1944-45, Ripon College.
24. Nirmalchandra Mitra, Cal. 515, Regd. No. 8463 of 1944-45, Ripon College.
25. Noor Mohammad Biswas, Cal. 552, Regd. No. 8925 of 1944-45, Ripon College.
26. Saktipada Bandyopadhyay, Cal. 553, Regd. No. 8241 of 1944-45, Ripon College.
27. Sunilkumar Basu, Cal. 570, Regd. No 8270 of 1944-45, Ripon College.

28. Ramendraprasad Chattopadhyay, Cal. 571, Regd. No. 8319 of 1944-45, Ripon College.
29. Md. Samsul Alam, Cal. 573, Regd. No. 8922 of 1944-45, Ripon College.
30. Jagabandhu Adhya, Cal. 621, Regd. No. 8228 of 1944-45, Ripon College.
31. Mohammad Abul Lais, Cal. 710, Regd. No. 8625 of 1944-45, Ripon College.
32. Binitkumar Basu, Cal. 1438, Regd. No. 10913 of 1944-45, Vidyasagar College.
33. Narendra Mishra, Cal. 1509, Regd. No. 10575 of 1945-46, Vidyasagar College.
34. Prakriti Samanta, Cal. F. 47, Regd. No. 4662 of 1944-45, Asutosh College.
35. Gauridas Basu, Hug. 20, Regd. No. 3251 of 1944-45, Hughli Mohsin College.
36. Md. Gholam-Safiuddin, Mym. 170, Regd. No. 2523 of 1944-45, Mymensingh A. M College.
37. Dilipkumar Biswas, Shi. 14, Regd. No. 5697 of 1944-45, Shillong St. Anthony's College.

A. P. DASGUPTA
*Controller of Examinations (Offg.)*

## UNIVERSITY OF CALCUTTA

NOTICE

Senate House, the 29th November, 1946

The following orders have been passed with regard to the cases of some candidates who had recourse to unfair means at the last I.A. Examination :—

(*i*) The examination of the undermentioned candidate is cancelled and he is debarred from appearing at any examination of the University in 1947-1951.

1. Pramodgopal Saha, Pab. N. 9, Regd. No. 6819 of 1943-44, Non-Collegiate student, Pabna Edward College.

(*ii*) The examination of the undermentioned candidates is cancelled and they are debarred from appearing at any examination of the University in 1947 and 1948 :—

2. Abdul Aziz, Brahm. N. 23, Regd. No. 9956 of 1940-41, Non-Collegiate student. Kanungopara Sir Asutosh College.
3. Abdul Samad Mullik, Cal N. 11, Regd. No. 7476 of 1940-41, Non-Collegiate student
4. Debendrakumar Ghosh, Dau. 154, Regd. No. 2198 of 1942-43, Daulatpur Hindu Academy.
5. Sukumar Bhattacharyya, Pab. 15, Regd. No. 7496 of 1944-45, Pabna Edward College.

(*iii*) The examination of the undermentioned candidates is cancelled and they are debarred from appearing at any examination of the University in 1947:—

6. Saurindramohan Ghosh, Pab. N. 7, Regd. No. 14244 of 1944-45, Non-Collegiate student, Pabna Edward College.
7. Shaikh Abdul Hamid, Dau. 179, Regd. No. 10801 of 1943-44, Daulatpur Hindu Academy.

(*iv*) The examination of the undermentioned candidates is cancelled :—

8. Sitansubhushan Ray, Cal. N. 747, Regd. No. 9292 of 1941-42, Non-Collegiate student, Bangabasi College.
9. Arunoday Sinha, Cal. N. 748, Regd. No. 12440 of 1944-45, Non-Collegiate student, Bangabasi College.
10. Priyanath Saha, Kanun. 31, Regd. No. 4967 of 1945-46, Kanungopara Sir Asutosh College.
11. Manilal Majumdar, Kanun. 35, Regd. No. 4958 of 1945-46, Kanungopara Sir Asutosh College.
12. Gopalkrishna Chaudhuri, Kanun. 107, Regd. No. 176 of 1944-45, Kanungopara Sir Asutosh College.
13. Sasankabimal Das, Kanun. 108, Regd. No. 190 of 1944-45, Kanungopara Sir Asutosh College.
14. Taritkanti Chaudhuri, Kanun. 109, Regd. No. 4923 of 1945-46, Kanungopara Sir Asutosh College.

A. P. DASGUPTA,
*Controller of Examinations (Offg.)*

## Students' Welfare Committee

### NOTICE

Applications are hereby invited from candidates for the competition for the Debendranath-Hemlata Gold Medal for the year 1946. The Medal is awarded to the student who passed any of the following examinations with the best of health and paying attention to his physique all through the University career, Graduates who have obtained any of the following degrees are entitled to compete for this Medal within *three years* of obtaining such degree :—*M.A.*,, *M.Sc.*, *M.L.*, *M.O.*, *M.S.*, *Ph.D.*, *D.Sc.*, *D.L.*, *M.D*, Competitors will have to appear before the Students' Welfare Committee of the Calcutta University for a routine Medical Examination and will also be subjected to such tests as may he decided upon by the Committee appointed for the purpose by the Syndicate.

In awarding the Medal the record of physical achievements of the candidates throughout their academic career will be taken into account.

Applications from the entrants for the competition are required to be forwarded by a member of the Senate or by the head of any Institution affiliated to this University, and must reach the office of the undersigned by the 20th January 1947.

Students' 'Welfare Office,
*Dated 7th December, 1946*

A. CHATTERJI.
*Hony, Secretary,*
*Students' Welfare Committee*
*University of Calcutta.*

## GIRTON COLLEGE, CAMBRIDGE PFEIFFER RESEARCH FELLOWSHIP IN ARTS—1947-1950

1. A Fellowship of the value of £ 250 a year, tenable for three years, is offered for research in any branch of learning ; except Mathematics, Natural Sciences, and allied subjects.

2. The Fellowship will be awarded by the Council on the recommendation of the Board of Electors, provided that in the opinion of the Board a candidate of sufficient merit present herself. If in the opinion of the Board no candidate of sufficient merit has presented herself, the Council may offer the Fellowship to some specially qualified woman, or may withhold it.

3. The election of the Fellow will take place in time to permit of the award by the Council not later than the middle of May.

4. Women who are graduates or have taken Honours in a final degree examination of any University shall be eligible. Preference will in general be given to candidates under thirty-five who have already carried our research in a definite field and wish to undertake a further specific piece of work arising out of their previous research : and on this occasion to graduates of Universities within the British Empire.

5. Applications shall be sent to the Secretary of the College in time to reach her not later than January 15, 1947.

6. Each candidate shall describe a course of research which she intends to pursue, and shall submit a dissertation or published work, or any other evidence she may desire to furnish of her fitness to undertake the proposed course of research. The names of two persons, who are conversant with the past work of the candidate and to whom the Electors may refer, should also be submitted. The candidate's age should be stated in the application, and any graduate Studentship or Fellowship which she has held.

7. The Fellow shall not engage in tuition or other paid work without the written permission of the Mistress. She shall report to the Council not later than June 1 in each year on the progress of her research, and the continued holding of the Fellowship shall be conditional on such report being satisfactory.

8. Unless the Council otherwise decide, the Fellow shall reside at the College during Full Term, and may so reside throughout the year.*

9. The tenure of the Fellowship shall be as from July 1 or October 1, at the option of the Fellow, and the emoluments shall be paid quarterly.

10. The Fellow may, if she wishes, give up the emoluments and still retain the title position and privileges of the Fellowship, during the period for which she has been elected, provided she fulfils the required conditions.

11. The Council reserves the right to replace the Fellowship by another of smaller value, or by an Honorary Fellowship, if the Fellow should hold or subsequently obtain any Fellowship or other emolument from any other body.

* The inclusive charge for residence for a Research Fellow is £ 60 a year.

Notification No. Misc. R8, Dated 10th December, 1946.

It is hereby notified for general information that the following changes in the calcutta University Regulations relating to the Course of Studies for the Bachelor of Engineering Examination have been sanctioned by Government.

**SEE APPENDIX A.**

N. B. (1) The above changes will be given effect to from the Examination of 1947.

(2) The old regulations under Chapter LI and LII (I.E. and B.E. Examinations respectively have been replaced by the new regulations under Chapter LI (Bechelor of Engineering Part I) and Chapter LII (Bechelor of Engineering, Part II) as given above. The old Chapter LII-A (B. Met. Examination) has been deleted and the Transitory Regulations for the B.E. Examination as shown above has been inserted at the end of Chapter LII.

Senate House, B. B. DUTT.

*The 9th December, 1946.* *Registrar (Offg.)*

# REGULATIONS FOR THE B.E. EXAMINATION

(As adopted by the Senate on 29th June, 1946)

## CHAPTER L I

## BACHELOR OF ENGINEERING EXAMINATION

### PART I

**(Common to Civil, Mechanical, Electrical and Metallurgy Courses)**

1. The Bachelor of Engineering Part I Examination will be held annually at such time and place as the Syndicate shall determine, the approximate date to be notified in the Calendar.

2. Any Under-graduate or Graduate of the University who has passed the Intermediate Examination with Mathematics, Chemistry and Physics may be admitted to the Examination, provided he has prosecuted a regular course of study in a College of Engineering affiliated to the University for two academic years after passing the Intermediate Examination.

3. Every candidate for the B.E. Part I Examination shall be examined in the subjects mentioned in Section 10 below.

A candidate may be permitted to appear in any or all of the subjects mentioned below at the end of the First Year subject to his completing the courses in those subjects and passing the Test examination held by the College immediately preceding the University Examination. Such a candidate may obtain credit for those subjects in which he passes when appearing at B.E. Part I Examination. (i) English, Current Orientation and Civics, (ii) Engineering Physics (Paper), (iii) Engineering Physics (Sessional and Practical), (iv) Engineering Chemistry (paper), (v) Engineering Chemistry (Sessional and Practical), (vi) Mathematics (paper I).

4. In order to pass the Bachelor of Engineering Examination, Part I a candidate must obtain forty per cent of the full marks of each subject and half of the aggregate.

5. A candidate must pass Part I of the B.E. Examination within four years of the date of his admission to the course, provided that in his fourth year he appears as a non-collegiate candidate. A candidate may, however, be permitted to appear after four years as a non-collegiate candidate if he is specially recommended by the Principal of his college.

6. Every candidate for admission to this Examination in whole or in part shall send to the Registrar his application with a certificate in the form prescribed by the Syndicate and a fee of Rs. 40 at least a month before the date fixed for the commencement of the Examination.

A candidate who fails to pass or to present himself for the Examination shall not be entitled to a refund of the fee.

7. A candidate who fails in one subject only and by not more than five per cent of the full marks in that subject, but has shown merit by gaining sixty per cent or more in the aggregate marks of the examination shall be allowed to pass.

8. If the Board of Examiners are of opinion that in the case of any candidate not covered by the preceding regulations, consideration ought to be allowed by reason of his high proficiency in a particular subject or in the aggregate, they shall report the case to the Syndicate, and the Syndicate may pass such a candidate.

9. As soon as possible after the B.E. Examination, Part I, the Syndicate shall publish a list in order of merit of those who have passed the B.E. Examination, Part I. Every candidate on passing shall receive a certificate in the form prescribed in Appendix A.

10. The subjects prescribed for B.E. Examination, Part I, and distribution of marks are as follows:—

| | | |
|---|---|---|
| (i) | English, Current Orientation & Civics ... | 100 |
| (ii) | Engineering Physics (Paper) ... ... | 100 |
| (iii) | Do (Sessional & Practical) ... ... | 100 |
| (iv) | Engineering Chemistry (Paper) ... ... | 100 |
| (v) | Do (Sessional & Practical) ... ... | 100 |
| (vi) | Mathematics—Paper I ... ... ... | 150 |
| (vii) | Do Paper II ... ... | 100 |
| (viii) | Surveying (Paper) ... ... ... | 100 |
| (ix) | Do (Sessional & Practical) ... ... | 100 |
| (x) | Details of Construction & Estimating ... | 100 |
| (xi) | Drawing (Paper) ... ... ... | 100 |
| (xii) | Do (Sessional) ... ... ... | 100 |
| (xiii) | Heat Engines I (Paper) ... ... | 100 |
| | Do (Sessional ... ... | 50 |
| (xv) | Applied Mechnics I & Graphics (Paper) ... | 100 |
| (xvi) | Do Do (Sessional) .. | 50 |
| (xvii) | Electro-technology (Paper) ... ... | 100 |
| (xviii) | Do (Sessional & Practical) ... | 50 |
| (xix) | Sociology & Industrial Relations ... ... | 100 |
| (xx) | Workshops (Sessional) ... ... ... | 200 |
| | Total ... | 2000 |

11. The limits of the subjects are as follows:—

## (I) ENGLISH, CURRENT ORIENTATION AND CIVICS

(*a*) English:—

Principles of English Composition and the rules of good use as applied to the word, the sentence, the paragraph and the whole composition. Development of vocabulary.

Class discussion of analysis of various types of English expressions. Letters, precis and essay writing. Talks and debates.

(*b*) Current Orientation :—

Careers and their meaning, Engineering, Industry, Science, Government Work.

(*c*) Civics :—

Modern forms of Government. Merits and Defects of Democracy. Public opinion. Political parties. Organs of Government—Legislature, Executive, Judicial. Separation of Functions. Organisation of the Legislature—executive and judiciary. Electorate—its extent and nature. Local Government—its categories. Citizenship. Rights and duties. Civic ideas. Nationalisms. United Nations Organisation.

## (II) ENGINEERING PHYSICS (Paper)

The subjects are to be treated with reference to their application to Engineering problems as far as possible.

General Properties of Matter—Viscosity and Viscometers.

Heat.—Technical thermometers. Calorimetry—principles and applications. Thermal conductivity theory and applications. Adiabatic and isothermal expansion.

Optics.—Defects of images formed by mirrors and lenses. Different types of eye-pieces. Telescopes, microscopes, sextants and other optical instruments used by Engineers.

Sound.—Recording and production of sound. Elementary treatment of acoustics of buildings.

—Electricity and Magnetism.—Primary and secondary cells. Phenomena of hysteresis and their applications and measurements. Electro-magnetic instruments. Measurement of resistance, current and e.m.f. Electrostatic condensers and measuring instruments.

Elementary treatment of X-rays and electronics.

## (III) ENGINEERING PHYSICS (Sessional and Practical)

The syllabus is mainly based on the subjects mentioned in the theorttical course.

## (IV) ENGINEERING CHEMISTRY (Paper)

Brief study of the manufacture, properties and uses in Engineering of copper, zinc, lead, tin, nickel, aluminium, iron and steel. The Cupola. Methods of making grey, chilled and malleable castings. Methods of shaping metals by forging, rolling and extruding. Short account of the metallography of steel. Hardening, tempering, annealing, normalizing and case hardening of steel and microstructure consequent on these operations. Corrosion of iron and method of its prevention. Protective coating of one metal on another. Paints, pigments and enamels. Welding and soldering of metals—brasses, bronzes, bearing and type metals.

Chemistry of boiler and potable water. Hard and soft water. Boiler scale, its composition and effect. Softening of boiler water. Substances that cause corrosion and priming. Significance of the presence of suspended solids, dissolved salt, albuminoid and saline ammonia, nitrites and nitrates in water.

Manufacture, composition and properties of limes. cements, plasters, common and refractory bricks, porcelain and glass. Building stones and road materials. Timbers and fabrics. Asphalts and lubricating oils and greases.

Study of the principal solid, liquid and gaseous fuels and combustion. Coal-tar and its derivatives and their uses. Flue gases and their composition.

Occurrence, characteristics, and chief uses of Indian coals.

## (V) ENGINEERING CHEMISTRY (Sessional and Practical)

Systematic qualitative study of simple and mixed substances containing not more than 3 radicals.

Acidimetry and Alkalimetry, determination of hardness of water; Volumetric and Gravimetric estimation of iron and calcium.

## (VI) MATHEMATICS—Paper I

(*a*) Elements of Analytical Geometry.—Rectangular cartesian co-ordinates and polar co-ordinates—Distance between two points—Areas of polygons—Geometry of straight lines—Standard equations of circle, parabola, ellipse and hyperbola—Equations of tangent and normal. Elementary co-ordinate geometry of three dimensions—Distance between two points. Equation of the straight line and the plane—Standard equations of the conicoids.

(*b*) Introduction to Calculus.—Function, limits, continuity. Rules of differentiation and methods of differentiation. Differentiation of different functions. Tangent and normal. Second derivative. Maxima and minima. Curvature (Cartesian form). Integration treated as inverse process of differentiation. Simple indefinite integrals. Integration by parts. Differential equations—equations with variables separable; Homogeneous equations.

(*c*) Mechanics.—General conditions of equilibrium. Friction. Machines. Elements of graphical statics. Velocity, Acceleration. Impulse. Impact. Projectile. Motion in a circle. Conical pendulum. Governors. Train on a banked track. Harmonic motion. Principle of energy. Motion about a fixed axis. Compound pendulum.

(*d*) Computation and Mensuration.—Use of logarithmic table. Application of logarithms to numerical calculation. Theory and use of slide rule. Problems of heights and distances. Solutions of triangles. Mensuration of plane and solid figures. Application of Simpson's rule. Prismoidal formulae and Guildin's theorem. Calculation of Earthwork.

(*e*) Graphical methods.—Graphs of elementary functions. Determination of law connecting two variables from tabulated values of variables—Graphical solution of equations—Graphic Differentiation and integration.

## (VII) MATHEMATICS—Paper II

(*a*) Differential Calculus.—Higher derivatives—Liebnitz's theorem—Rolle's theorem—Mean value theorem—Taylor's theorem—Maclaurin's theorem—Application to theory of maxima and minima—Numerical evaluation of transcendental functions—Newton's method of Root Extraction—Partial derivatives—Calculus of errors—Taylor's expansion for two or more variables—Maxima and minima of functions of two or more variables.

(*b*) Integral Calculus.—Integration defined as a limit of a sum—Various theorems leading to indefinite integrals—Mean Value Theorem—Various methods of integration. Double integration. Application to determination of areas, volumes, centroids and moments of inertia.

(*c*) Differential Equations.—Linear differential equations. Linear equations of higher order with constant co-efficients. Complementary function. Particular integral. Application to Engineering Problems. Integration in series—Simple Convergency tests. Fourier series.

## (VIII) SURVEYING (Paper)

Chain survey—principles and procedure, equipment and instruments—permissible errors and accuracy. Determination of areas, use of pantograph, planimeter.

Prismatic compass survey—principles and procedure, precautions, use of clinometer and sextant.

Levels and levelling—instruments and their adjustments; accessories; principles of levelling and procedure; precautions; reciprocal levelling and contouring.

Theodolite—The Instrument and its use. Methods of traverse survey and Gale's system. Traverse tables and corrections.

Use of Plane table and its accessories—Triangulation; procedure and three point problem, determination of position; precautions and accuracy.

Curve tracing and setting-out work.

## (IX) SURVEYING

### (Sessional and Practical)

The practical work will consist of field work and preparation of survey drawings in accordance with the lecture syllabus.

## (X) DETAILS OF CONSTRUCTION AND ESTIMATING

(*a*) Details of construction.--Building regulations. Sites and foundations. Timbering. Shoring. Scaffolding. Underpinning. Brick and stone masonry. Reinforced concrete and brick work, centres and moulds. Walls, piers and retaining walls. Arches, Vaulting and domes. Lintels and sunshades Floors and roofs of buildings. Doors, windows and partitions Carpentry and wooden joints. Staircases. Steel skeleton buildings. Minor bridges.

(*b*) Estimating.—(i) Standard methods of measurements—approximate and accurate. Taking out quantities and materials of simple buildings, culverts, wells, etc. Pricing. Analysis of rates. Preparation of indent of materials for simple masonry structures. (ii) Weights and costs of machine details

## (XI) DRAWING (Paper)

Use of Drawing Instruments. Lettering, scales and geometrical drawing. Projections of points, lines, planes and solids. Sections of solids. Intersection of planes.

Development of surfaces of solids. Inter-penetration of solids. Isometric drawing of simple geometrical solids. Drawing of simple buildings with details from models. Colouring

Drawing of buildings, culverts and engineering constructional details from measurements of actual objects. Isometric drawings of buildings and culverts. Building design from specification.

Orthographic projection of simple machine parts. Free hand sketches and scale drawings of simple machine parts.

Mechanical drawing conventions. Dimensioning of work shop drawings. Screwed fastening. Rivets and riveted joints Locking devices for nuts. Shaft keys; cotters; shaft couplings; shaft bearings; stuffing boxes; lubricators; hangers; brackets; valves; eccentrics; cross-heads; connecting rods; governors. Development of sheet metal work.

## (XII) DRAWING (Sessional)

Sessional work will consist of a number of drawing plates dealing mainly with the subjects mentioned in the theoretical course of the same subject.

## (XIII) HEAT ENGINES I (Paper)

Properties of Steam.—Steam Generation; superheating; condensing. The use of Steam Tables. Boilers; economisers; feed-heaters; feed pumps; boiler fittings. Boiler losses and efficiencies. Steam calorimeters. Fuels and combustion.

Condensers and Air Pumps.

The Steam Engine.—Its various parts and their functions;

elementary theory and calculations. The indicator; indicator diagrams; indicated horse power. Brake Horse power. The slide valve and piston valve; valve diagrams. Other types of valves. Simple valve gears.

Elementary principles of thermodynamics. Laws of gases.—Operations inolving changes in volume, pressure and temperature under various conditions. Internal energy and external work. Ideal and actual engine cycles. Steam engine efficiencies.

Internal Combustion Engines.—Ideal cycles of operation. The four-stroke cycle gas engine; description, methods of governing, ignition, valve timing, calculation of power and efficiency. Producers and producer gas. The two-stroke cycle engine. The petrol engine; carburettors. The oil engine; compression ignition; blast injection; airless injection; fuel systems and governing; four-stroke and two-stroke types. The Humphrey pump.

## (XIV) HEAT ENGINES I (Sessional)

Prime Movers Laboratory.—Description and testing of the various equipment required in power plant tests. The carrying out of simple tests on engines, boilers and condensers.

## (XV) APPLIED MECHANICS I AND GRAPHICS (Paper)

Strength of Materials.—Stress, strain, and elasticity. Hooke's Law. Elastic constants. Poisson's ratio. Temperature stresses. Heterogeneous bars under direct stress. Boiler shells.

Testing of materials in tension and compression.—Stress-strain diagrams; limit of proportionality; elastic limit; yield point; ultimate strength; proof stress; working stress; factor of safety. Effect of shape of test piece and its composition. Nature of fracture. Percentage elongation and reduction of area. Standard test pieces. Typical stress-strain diagrams for mild steel, wrought iron, cast iron, copper, brass, bronze, aluminium and its alloys. Repetition of stress. Sudden or dynamic loading. Impact. Resilience.

Beams and Bending.—Bending Moment and Shearing Force diagrams for the standard cases of loading on cantilevers and beams freely supported at the ends—Graphical method for drawing the B. M. and S. F. diagrams for any irregular system of loading on cantilevers and freely supported beams. Method of superposition.

Stresses due to bending.—Simple bending. Moment of Resistance. Moment of Inertia. Radius of Gyration.

Section Modulus, Calculation of 'I' and 'Z' for simple cross sections—General method. Graphical method for the determination of 'I.'

Shear stress in beams.—Rectangular, circular and girder sections.

Polar moment of inertia.—Simple torsion of shafts.

Earth pressure.—Minimum depth of foundations by Rankine's theory.

Graphic Statics.—Stress diagrams; triangular frames and trusses; cranes and derricks; sheerlegs and tripods.

Theory of Machines.—Elementary kinematics. Simple mechanisms. Simple machines. Friction between working surfaces; work lost in friction.

Belt drives; Rope drives; friction in belts and ropes; centrifugal force.

Toothed gearing.—Circular and diametral pitch; tooth shapes.

Wheel trains.—Simple and compound; reverted trains; epicyclic trains.

Screw mechanisms.—Worm gears.

Simple cams.

## (XVI) APPLIED MECHANICS I AND GRAPHICS

**(Sessional)**

Experiments on statics, involving forces at a point or on a body. Moments; couples. Inclined plane. Friction. Centroids.

Simple frames. Simple machines.

Dynamical experiments.—Experiments on velocity and acceleration; momentum; kinetic energy; fly wheels; simple and compound pendulums; centrifugal force.

Experiments involving stress and strain.—The straining of wire; Young's modulus. Simple tests of different materials in tension, compression, shear, bending, torsion, impact and hardness.

## (XVII) ELECTRO-TECHNOLOGY (Paper)

Mechanical, Thermal and Electrical Units and Standards. Simple laws of Electrical circuits. Electro-magnetic forces and induction of E. M. F. Magnetic properties of iron and steel. Conductors and insulators. Secondary cells—acid and alkaline batteries. Wiring for domestic installation and power circuits. I. E. E. rules—Testing of installations and tables for wires and cables. Low and medium pressure distribution—D. C. and A. C. systems.

D. C. machines.—E. M. F. equation, windings, armature reaction and commutation. Generators and motors—series, shunt, compound and separately excited; simple characteristics. Principles of starting and speed control of motors. Determination of efficiency.

A. C. machines and circuits.—Average, maximum, and H. M. S. values of A. C. voltage and current; phase difference: vectorial representation; series and parallel circuits; Power factor; measurement of A. C. power; single-phase and polyphase circuits. Different types of A. C. machines and their working—Alternators, transformers, synchronous and asynchronous motors, rotary converters and mercury arc rectifiers.

Commercial measuring instruments.—D. C. and A. C. ammeters, voltmeters, wattmeters and integrating meters. Low and high resistance measuring instruments, Ohm-meters, meggers, earth-testers, etc.

## (XVIII) ELECTRO-TECHNOLOGY

### (Sessional and Practical)

Measurement of low and high resistances; calibration of ammeters and voltmeters; different uses of milli-voltmeters and milli-ammeters; fault localisation of electrical circuits; uses of megger and earth-tester; practical house wiring; determination of no-load characteristics of series, shunt, compound and separately excited generators and motors.

## (XIX) SOCIOLOGY AND INDUSTRIAL RELATIONS

(*a*) Sociology:—

Evolution of Family, Tribe, Clan, Nation, State—Private property, Joint Family—Class and Caste—Guilds—Individualism. Socialism, Communism—Rights and duties of the Individual in the modern society and democratic state.

Factors controlling working relations of human beings—general features of social organisation in industrial life—cottage industries and capitalistic enterprise—survey of diverse economic adaptation, social structure and community life—urban and rural environments—city planning—shifting of Industries and movements of population—housing, health, education and recreation.

(*b*) Industrial Relations:—

Nature of Labour Recruitment in present day economic life. Factory Labour organisation in India—Wages and methods of remuneration—Time work, piece work, premium bonus, profit sharing, collective bargaining—Trade unions—Strikes and Lockouts—Unemployment—Industrial conciliation and arbitration, Social Insurance.

Government control of Industry—Compulsory arbitration—Labour Legislation—Powers and Acts of Central and Provincial Governments in India.—Hours of employment.

(*c*) Labour Welfare & Industrial Hygiene:—

Maintenance of effectiveness of workers—Industrial fatigue—Rhythm and monotony—Rest pause—Causation and prevention of principal industrial diseases—Industrial poisoning, dust control, ventilation and health administration—Plant sanitation—Lighting, atmosphere control, noise, vibration, safety, etc.—Protection of women and children.

## (XX) WORKSHOPS (Sessional)

(*a*) Carpentry:—

Tools—names, care, use and maintenance. The detection of defects in timber: Sawing, Planing, Squaring and Gauging.

Practical examples of various joints used in Carpentry, *e.g.*, Half Lap, Dovetail Notch (Various types). Mortice and Tenon (Various types). Bridle joint, etc.

(*b*) Smithy:—

Tools—Names, care, use and maintenance.

Use of Anvil:—

Construction of Forge and maintenance of Fire.

Practical exercises involving the processes of Jumping, Drawing, Cutting, Bending, Welding, etc., *e.g.*, Hexagonel Bolts. Pipe Hooks. Clamps (Various types). Chisels (Various types).

(*c*) Pattern Making Course:—

Selection of Timber; Use of contraction Scale; Construction of various types of Patterns, as for example:—Solid. Built-up. Split. Skeleton. Sweep, etc. Core boxes of different types.

Exercises on simple types of patterns and Core Boxes of various groups.

(*d*) Foundry Course:—

Composition of Moulding sand; Simple Green sand; Moulding and Core making practice using simple patterns. Demonstrations on Dry and Loam Sand Moulding; Demonstration on Machine Moulding.

Study of the construction of Cupolas. Charging. Melting. Tapping and pouring of Metal.

Fettling of Castings; Defects of Castings, and Remedies.

Detailed syllabuses of studies in the subjects for the B.E. Part I Examination may be modified from time to time by the Syndicate on the recommendation of the Board of Studies in Engineering.

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## CHAPTER LII

## BACHELOR OF ENGINEERING EXAMINATION PART II

1. The Bachelor of Engineering Part II Examination will be held annually at such time and place as the Syndicate shall determine, the approximate date to be notified in the Calendar.

2. The Examination will be held in the following branches:—

(A) Civil Engineering.
(B) Mechanical Engineering.
(C) Electrical Engineering.
(D) Metallurgical Engineering,

and the Diploma shall state distinctly in which branch the candidate has qualified.

3. Any undergraduate or graduate of the University may be admitted to this examination, provided he has prosecuted a

regular course of study in a College of Engineering affiliated to the standard of B.E. Part II examination for two academic years in the particular branch in which he presents himself for examination after passing the B.E. Part I Examination.

A candidate shall not present himself for examination in any one year in more than one branch of Engineering, but he shall be eligible, after passing in one of the branches of Engineering, for appearing at any of the other branches provided he has prosecuted a fresh course of study prescribed under the Regulations for B.E. Part II of that branch, for a period of two academical years in a college affiliated to the B.E. standard. He shall be excused attendance and examination in the subjects in which he has previously passed.

4. A candidate may, however, appear in any or all of the subjects mentioned below for the respective branches at the end of the first year of the B.E. Part II course subject to his completing the course in these subjects and passing the test examination held by the College immediately preceding the University Examination:—

Such a candidate may obtain credit for those subjects in which he passes when appearing at B.E. Part II Examination.

(A) Civil Engineering—(i) Economics and Accounts, (ii) Applied Mechanics (Strength of Materials), (iii) Geodesy, (iv) Geodesy (Sessional & Practical), (v) Geology, (vi) General Civil Engineering (Ppaper I),(vii) General Civil Engineering (Paper II), (viii) Structures and Design (Paper I).

(B) Mechanical Engineering—(i) Economics and Accounts, (ii) Applied Mechanics (Strength of Materials), (iii) Metrology, (iv) Metrology (Sessional and Practical), (v) Electro-Technology, (vi) Electro-Technology (Sessional and Practical), (vii) Heat Engines II.

(C) Electrical Engineering—(i) Economics and Accounts, (ii) Applied Mechanics (Strength of Materials), (iii) Heat Engines II, (iv) Heat Engines II (Sessional), (v) Mathematics, (vi) Advanced Electro-Technology.

(D) Metallurgical Engineering—(i) Economics and Accounts, (ii) Refractories, Furnaces & Fuels (Paper); (iii) Refractories, Furnaces & Fuels (Sessional); (iv) Inorganic & Physical Chemistry (Paper); (v) Inorganic & Physical Chemistry (Practical & Sessional); (vi) Geology, Mineralogy & Dressing of Minerals (Paper); (vii) Geology, Mineralogy & Dressing of Minerals (Sessional); (viii) Electrical Engineering.

5. In order to pass the B.E. Part II Examination a candidate must obtain 40 per cent of the full marks of each subject and half of the aggregate. In order to be placed in the first class, a candidate must obtain two-thirds of the aggregate marks of the B.E. Part II Examination. A successful candidate getting less than two-thirds will be placed in the Second Class. The candidate who is placed first in the first class in each Branch shall receive a gold medal and a prize of books to the value of Rs. 200, provided that he has not taken more than 2 years in passing the B.E. Part II Examination after passing Part I.

6. A candidate must pass Part II of the B.E. Examina-

tion within four years of the date of his admission to the Part II course, provided that in his fourth year he appears as a non-collegiate candidate. A candidate may, however, be permitted to appear after four years as a non-collegiate candidate if he is specially recommended by the Principal of his College.

7. Every candidate for admission to the B.E. Part II Examination in whole or in part shall send to the Registrar his application in the form prescribed by the Syndicate together with a fee of Rs. 50 at least a month before the date fixed for the commencement of the Examination.

A candidate who fails to pass or to present himself for the examination shall not be entitled to a refund of the fee.

8. A candidate who fails in one subject only and by not more than five per cent of the full marks in that subject, but has shown merit by gaining sixty per cent or more in the aggregate marks of the Examination shall be allowed to pass.

9. If the Board of Examiners are of opinion that in the case of any candidate not covered by the preceding regulations, consideration ought to be allowed by reason of his high proficiency in a particular subject or in the aggregate, they shall report the case to the Syndicate, and the Syndicate may pass such a candidate.

10. As soon as possible after the B.E. Part II Examination the Syndicate shall publish a list, arranged in two classes, in order of merit, of those who have passed the B.E. Part II Examination in each Branch. Every candidate on passing shall receive a Diploma in the form prescribed in Appendix A.

11. Graduates in Engineering will be required to undergo practical training for one year in an approved Engineering Establishment after completing their Degree Course.

12. The subjects prescribed for the B.E. Part II Examination and distribution of marks in the respective branches of Engineering are as follows:—

**(A) Civil Engineering**

| | | Marks. |
|---|---|---|
| (i) | Economics and Accounts ... ... | 100 |
| (ii) | Applied Mechanics (Strength of Materials) ... | 100 |
| (iii) | Geodesy (Paper) ... ... ... | 100 |
| (iv) | Do (Sessional & Practical) ... ... | 100 |
| (v) | Geology ... ... ... ... | 100 |
| (vi) | General Civil Engineering (Paper I) ... | 100 |
| (vii) | Do (Paper II) ... | 100 |
| (viii) | Structures & Designs (Paper I) ... ... | 150 |
| (ix) | Do (Paper II) ... ... | 150 |
| (x) | Do (Sessional) ... ... | 100 |
| (xi) | Applied Mechanics (Hydraulics) ... ... | 150 |
| (xii) | Do (Sessional) ... ... | 100 |
| (xiii) | Planning, Layout & Estimating ... ... | 150 |
| (xiv) | Elective ... ... ... ... | 200 |
| (xv) | Project & Thesis (Sessional) ... ... | 300 |
| | Total ... | 2,000 |

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Electives:— (*a*) Railway & Highway Engineering.
or (*b*) Sanitary Engineering.
or (*c*) Irrigation & Flood Control.
or (*d*) Water Power Engineering.
or (*e*) Advanced Building Construction & Architectural Design.

**(B) Mechanical Engineering**

| | | Marks. |
|---|---|---|
| (i) | Economics and Accounts ... ... | 100 |
| (ii) | Applied Mechnics (Strength of Materials) ... | 100 |
| (iii) | Metrology ... ... | 100 |
| (iv) | Metrology (Sessional & Practical) ... ... | 50 |
| (v) | Electro-Technology (Paper) ... ... | 100 |
| (vi) | Electro-Technology (Sessional & Practical) ... | 50 |
| (vii) | Heat Engines II. ... ... ... | 100 |
| (viii) | Heat Engines III. ... ... ... | 100 |
| (ix) | Do (Sessional) ... ... | 50 |
| (x) | Applied Mechanics (Theory of Machines) ... | 150 |
| (xi) | Do (Hydraulics) ... ... | 150 |
| (xii) | Do (Sessional) ... ... | 100 |
| (xiii) | Works Organization and Management ... | 100 |
| (xiv) | Workshop Theory ... ... ... | 100 |
| (xv) | Drawing and Design ... ... ... | 150 |
| (xvi) | Elective ... ... ... ... | 200 |
| (xvii) | Project and Thesis (Sessional) ... ... | 300 |
| | Total ... | 2,000 |

Electives:— (*a*) Production Engineering.
or (*b*) Machine Tools.
or (*c*) Automobile Engineering.
or (*d*) Refrigeration and Air-Conditioning.

**(C) Electrical Engineering**

| | | Marks. |
|---|---|---|
| (i) | Economics & Accounts ... ... ... | 100 |
| (ii) | Applied Mechanics (Strength of Materials) ... | 100 |
| (iii) | Heat Engines II (Paper) ... ... | 100 |
| (iv) | Do (Sessional) ... ... | 50 |
| (v) | Mathematics ... ... ... | 100 |
| (vi) | Advanced Electro-Technology ... ... | 150 |
| (vii) | Electrical Machines (Paper) ... ... | 100 |
| (viii) | Do (Sessional) ... ... | 100 |
| (ix) | Switchgears & Instruments ... ... | 100 |
| (x) | Do (Sessional) ... ... | 50 |
| (xi) | Applied Mechanics (Hydraulics) ... ... | 150 |
| (xii) | Do (Sessional) ... ... | 100 |
| (xiii) | Works Organisation & Management ... ... | 100 |
| (xiv) | Transmission and Distribution of Electrical Power | 100 |
| (xv) | Planning & Design of Power Systems ... | 100 |
| (xvi) | Elective ... ... ... ... | 200 |
| (xvii) | Project and Thesis (Sessional) ... ... | 300 |
| | Total ... | 2,000 |

Electives :— (*a*) Electrical Communication.
or (*b*) Electric Traction.
or (*c*) Illumination Engineering.
or (*d*) Hydro-electric Plants.

### (D) Metallurgical Engineering

| | | Marks. |
|---|---|---|
| (i) | Economics and Accounts ... ... | 100 |
| (ii) | Refractories, Furnaces and Fuels (Paper) ... | 100 |
| (iii) | Do Do (Sessional) ... | 50 |
| (iv) | Inorganic and Physical Chemistry (Paper) ... | 100 |
| (v) | Do Do (Sessional & Practical) ... | 50 |
| (vi) | Geology, Mineralogy and Dressing of Materials (Paper) ... ... ... ... | 100 |
| (vii) | Do (Sessional) ... | 50 |
| (viii) | Electrical Engineering ... ... | 100 |
| (ix) | Metallurgy of Iron and Steel ... ... | 200 |
| (x) | Metallurgy of Non-ferrous Metals ... ... | 100 |
| (xi) | Assaying & Metallurgical Analysis (Paper) ... | 50 |
| (xii) | Do (Sessional & Practical) .... | 100 |
| (xiii) | Works Organisation & Management ... | 100 |
| (xiv) | Electro-Metallurgy & Mechanical Working & Testing of Metals ... ... ... | 100 |
| (xv) | Do (Sessional) ... ... | 50 |
| (xvi) | Metallography Heat Treatment and Pyrometry (Paper) ... ... ... ... | 100 |
| (xvii) | Do (Sessional & Practical) .... | 100 |
| (xviii) | Elective ... ... ... ... | 150 |
| (xix) | Project & Thesis (Sessional) ... .... | 300 |
| | Total ... | 2,000 |

Electives :— (*a*) Advanced Metallurgy of Alloy Steel.
or (*b*) Advanced Metallurgy of non ferrous alloys.
or (*c*) X-ray-crystallography, and Spectroscopy of metals and Alloys.

13. The limits of subjects for the different branches are as follows :—

## (A) CIVIL ENGINEERING

### A (I) Economics and Accounts

Economics.—A brief sketch of the economic system of present day Production and Distribution, with special reference to Indian conditions in domestic and international aspects.

Wealth and prosperity. Demand and Supply of goods. Agents in Production. Raw materials and resources of Indus-

try. Supply of Labour. Standard of Living. Efficiency and wages. Industrial evolution. Machinery and capitalistic enterprise. Industrial organisation. Localisation of Industry. Monopolies and trusts. Rationalisation. Partnerships and Jointstock Companies. Managing agencies. Financial organisation. Provision of capital. Shares and debentures. Wages and profits. Factory and Office management. Depreciation. Insurance.

Value & Exchange. Markets. Joint and Composite Demand and Supply. Money and Credit. Index Numbers. Banking. Domestic and International Trade. Foreign Exchanges. Taxation.

Book Keeping and Accounts. The Journal, Cash Book, Purchase Book, Sale Book, Ledger. Double Entry, Balancing, Trial Balance, Balance Sheet. Bad debts. Trading and Profit and Loss Accounts. Auditing.

Financial statement. Valuation and depreciation. Principles of Industrial Accounting. Costing and Estimating. Prime costs. Wages and material. Oncosts and their determination. Control of expenditure—authorisation and budget.

Specifications—Specifications for inviting Tenders; information to be given on preliminary inquiry and on placing the orders; contracts for supply; erection; guarantee, and acceptance; standard forms of Contracts.

Interpretation of financial statements in which Engineering students who enter business will be interested. A description of the Book Keeping methods is to be presented (but not in great detail) so as to enable an average student to keep a set of Business Books. Emphasis will be placed on the study of actual business problems.

## A (II) APPLIED MECHANICS (Strength of Materials)

### (Paper)

Compound stresses and strains.—Elipse of stress. Principal stresses; principal planes. Thick cylinders and spheres. Compound cylinders. Force and shrink fits. Rotating rings and discs. Alternating stresses. Fatigue. Effect of temperature on the strength of materials; high temperature-resisting steels; plastics. Overstrain. Creep. Growth of castings.

Beams with unsymmetrical cross-section; momental ellipse. Flitched beams, Flanged girders, Reinforced concrete beams.

Moving loads.—Standard cases; maximum bending-moment and maximum shearing-force diagrams; equivalent uniformly-distributed load for a series of wheel loads.

Deflection of beams.—Cantilevers and freely supported beams with concentrated and distributed loads. Macaulay's method. Mohr's theorem and its applications. Propped beams. Graphical methods for the determination of deflection.

Encastre beams.—Symmetrical and unsymmetrical loading conditions—General case. Beams fixed at one end and

freely supported at the other—General case. Variation in level of supports.

Continuous beams. Theorem of Three Moments. Semi-Graphical treatment. Characteristic points.

Combined bending and direct stress.

Columns and struts—Crippling load, slenderness ratio. Euler's formula, columns with eccentric loads, columns with initial curvature. Equivalent eccentricity. Perry strut formula. Empirical formulae—Rankine's formula, straight line formula, Johnson's parabolic formula and other formulae.

Shear in columns.

Laterally loaded columns and tie bars.

The shear centre. Non-Uniplanar bending. Curved beams. Crane hooks; rings; links.

Torsion.—Torsion and bending combined. Stresses in crank shafts. Torsion of non-circular cross-sections.

Springs.—Carriage springs. Close-coiled cylindrical spiral springs. Open coiled cylindrical spiral springs.

Strain energy.—Deflection due to bending and due to shear and deflection of framed structures by the strain energy theory.

Elastic vibrations. Transverse, longitudinal, and torsional vibrations. Whirling of shafts; critical speeds.

Methods of testing and appliances used in determining the elastic constants and in testing materials to destruction under tension, compression, shearing, torsion and bending. Impact and hardness tests. Effect of rate of loading, overstrain, and heat-treatment. Some knowledge of the principal experimental work on the testing of materials. An elementary knowledge of the physical properties of the common materials used in Engineering.

## A (III) GEODESY (Paper)

Surveying.—Various causes of errors in levelling. Elimination of such errors. Customary limits for errors. Theory and use of the stadia method of plane-tabling with levelled heights and reduction of distances and heights by slide-rule. The three point problem of plane-tabling by resection from within and without the triangle. Geometrical and trigonometrical proof of the three-point problem. The two point problem with and without the magnetic compass. Triangulation with reciprocal value; heights of stations; base line measurements. Finding values of position by observations to three known points.

Contouring of the triangulated areas by heights calculated from the reduced levels. The location of the map of a road, railway, canal, or weir, etc. The general principles of tunnel alignment and of carrying surface meridians underground for mine-surveys. Discussion on the latest patterns of instruments.

Practical Astronomy.—Introduction to spherical trigonometry up to the solution of the spherical triangle, and the adaptation of Napier's rules of circular parts. Definitions; systems of celestial co-ordinates; the seasons for sidereal, sun, and mean time; acceleration, retardation and equation of time. The Julian and Gregorian calendars, and the various astronomical corrections.

Finding the meridian of a place by observations of the sun or at upper culmination by equal altitudes, by the sun or stars not in the meridian and by circumpolar stars at elongation, and finding time by the sun or stars on the meridian and ex-meridian, finding latitude by polaries and circum-meridional observations. Use and construction of sun-dials.

Railway Curves and Alignments.—Theory of curves. Curves laid out with the aid of angular instrument; with one theodolite. Curve by ordinates from the long chord. Curve with certain given data to pass through a ruling point. Compound curves. Diversion curve. Vertical curves. Curve spiral or transition curve. Double-centre method for laying-out straight line.

## A (IV) GEODESY (Sessional and Practical)

The course is mainly based on subjects mentioned in the theoretical syllabus.

## A (V) GEOLOGY

(a) Physical Geology.—A general view of the earth. Rocks and minerals. General character of igneous, sedimentary and metamorphic rocks. Weathering and disintegration of rocks by atmospheric agents. Denudation by rivers, glaciers, wind and seas. Results of weathering. Deposition of detritus. Consolidation of sediments: lamination and stratification. Volcanoes: form structure and products; types of eruption. Mode of occurrence of igneous rocks, dykes, sills, necks or piles, laccoliths and batholiths. Secular movements of the earth's crust. Earthquakes.

(b) Structural Geology.—Results of crustal movements; folding of strata, folds, dips, strikes. Fracturing; normal and reverse faults, hade, throw and heave, dip and strike faults, and their effects on outcrops; step, trough and ridge faults; origin of faults. Joints and cleavage planes. Relation of folds, faulting, and joints to Engineering work. Conformable and unconformable strata: overlap. Outcrops: effects of topography on outcrops, tracing of outcrops, thickness of strata and their measurements.

(To be accompanied by exercises in constructing geological sections, solution of problems in geological structures, and practice in reading geological maps).

(c) Palaeontological Geology.—Fossils: their mode of preservation; rocks in which they occur. Importance of fossils in stratigraphical geology.

(d) Stratigraphical Geology.—Leading principles of stratigraphy. A brief outline of Indian stratigraphy.

(e) Petrology.—Igneous rocks—Texture, relation of texture to mode of occurrence. Classification. Character and essential constituents of the more important igneous rocks.

Sedimentary rocks.—Characteristics. Mode of origin and classification. General description of the different sedimentary rocks.

Metamorphic rocks.—Kinds of metamorphism. Characteristic structures. General description of the commoner kinds of metamorphic rocks.

(To be accompanied by exercises in the recognition of rocks from hand specimens).

(f) Crystallography.—Symmetry, Systems and their symmetry.

(g) Mineralogy.—Physical properties of minerals in general. Particular description of the following minerals:—native elements; graphite, diamond, gold. Sulphides:—pyrite, galena, sphalerite, chalcopyrite. Oxides:—Quartz, corundum, magnetite, hematite, limonite, braunite, pyrolusite, psilomelane, chromite, cassiterite, bauxite, laterite.

Oxysalts—Carbonates—calcite, dolomite, magnesite. Sulphates—gypsum. Phosphates—apatite. Silicates—Feldspar group, felds-pathoid group, pyroxene group, amphibole group, olivine, muscovite, talc, serpentine.

(h) Ore-deposits.—Form origin and classification of ore-deposits. Enrichment of ore-deposits.

(i) Engineering Geology.—Road metal, ballast, building stones. Surface and underground water supply. Dams and reservoirs. Tunnels and cuttings. Foundations, building sites. Stability of hill slopes. Quarrying. Protection of coast and river banks from erosion.

## A (VI) GENERAL CIVIL ENGINEERING (Paper I)

Roads and Railways.—Different classes of roads. Survey, construction and maintenance of metalled and unmetalled roads. Hill roads. Culverts and bridges. Survey, location and preparation of Railway Project. Earthwork and permanent-way materials. Standard dimensions. Tunnels and bridges.

## A (VII) GENERAL CIVIL ENGINEERING (Paper II)

Sanitary Engineering.—Drainage and sewerage. Introductory definitions and discussion. Historical review. Systems of sewerage, combined and separate. Sewers and drains—sewer materials and cross-sections. Computation for flow in sewers and drains. House drainage—description of fittings of sanitary engineering and plumbing equipment. Public latrines

and urinals. Sewage disposal—treatment of sewage. Selection of site for disposal works.

Water Supply.—Historical Review. Value and importance of a public water supply. Consumption of water for different purposes. Sources of supply. Relation of rainfall to water supply. Works for the collection, purification, and distribution of water.

Irrigation.—Introductory definitions and discussions. Functions of irrigation works. Lift irrigation—Methods of raising water from low-lying depressions and wells. Gravity irrigation—Classification of canals. Design and requirements of different types of canals. Survey for selection of alignments of canals. Headworks—Description and selection of site. Works—Description of escapes, falls, rapids, etc. Drainage and training works.

## A (VIII) STRUCTURES AND DESIGN (Paper I)

Framed structures. Clark Maxwell's reciprocal theorem. Method of sections. Stress analysis of statically determinate space frames. Method of tension coefficients. Williot Mohr diagrams for deflection of framed structures. Shear legs, tripods and derrick cranes.

Influence lines for simple beams. Position of wheel loads for maximum bending moment, shear and reaction. Equivalent uniformly distributed load—graphical method.

Riveted joints and connections of structural members. Torsion in a group of rivets. Tension in rivets. some knowledge of experiments on riveted joints.

Working stresses. Factor of safety. Structural steel work.

Design of tension members. Stiff ties. Net area of tension members.

Design of compression members. Asimont's device Columns for buildings. Batten plates.

Design of beams and built-up girders. Gantry girders.

Masonry structures. Piers and buttresses. Reservoir walls. Walls and chimneys.

Foundations. Masonry footings and grillages.

Reinforced concrete. Columns and rectangular freely supported beams and slabs. Design of small foundation blocks.

General details and design of a steel roof truss, a built-up gantry girder and a steel frame building.

## A (IX) STRUCTURES AND DESIGN (Paper II)

Structures.—Three-pinned parabolic, semi-elliptic, and segmental arches. Influence lines for three-pinned arches. Application of the strain-energy theory to frames. Stresses in redundant frames and statically indeterminate structures.

Elastic theory of Arches. Influence lines for two-hinged and rigid arches.

Masonry arches.—Masonry dams, gravity dams and arched dams. Uplift, experimental determination of stresses in dams.

Foundations.—Types of foundations, footings, inverted arches, grillages, pile foundations, sheet piling and cylinder and caisson foundations. Soil mechanics.

Reinforced concrete.—Simple and doubly reinforced concrete rectangular beams, steel-beam theory, Tee-beams.

Shear, bond and diagonal tension, its nature, evaluation and location of reinforcement.

Equivalent moment of Inertia of reinforced concrete sections.

Slabs and continuous beams.

Columns with concentric and eccentric loads.

Slab foundations, combined footings, cantilever and counter-fort retaining walls.

Design of compression members. Bridge compression members. Lattice bracing and batten plates.

Influence lines for panelled girders, for braced girder with parallel flanges and curved flanges. Influence lines for fixed and continuous beams. Girder bridge construction—main girders, floor system and the secondary bracing. Fixed and opening types of bridges.

Suspension bridges. Continuous girder and cantilever bridges. Influence lines for cantilever bridges.

Portal bracing with hinged and fixed bases; braced portals. Portals carrying lateral loads.

Analysis of stiff-jointed frames. Secondary stresses in framed structures. Experimental analysis of stresses in frames.

Theories of Earth-pressure.—Stress analysis of retaining walls and dams. General details and design of structures in appropriate materials (steel, masonry, concrete, etc.) such as fixed and opening types of bridges, building frames and floors, piers and columns, pylons and masts, footings and foundations, combined footings, hinged and fixed arches, tunnel and culvert sections, dams, retaining walls, chimneys, storage bins, staircases, domes, etc.

## A (X) STRUCTURES AND DESIGN (Sessional)

The course is mainly based on subjects mentioned in the syllabus for Structures and Design—Papers I and II.

## A (XI) APPLIED MECHANICS (Hydraulics)

Fluid pressure, its transmission and measurement. Nature and action of simple hydraulic machines. Density, Specific gravity. Atmospheric pressure; Barometers, syphons, pressure gauges; resultant pressure, centre of pressure, pressure on lock gates and dams. Buoyancy and metacentre.

Velocity and volume of flow. Principle of continuity, stream line and eddy flow, fluid acting on a piston, hydraulic head, Bernoulli's theorem. Venturi meters, Radial flow, Centrifugal head impressed on a revolving liquid, the pitot tube.

Flow of water through small and large orifices—Co-efficient of velocity—Co-efficient of contraction—Co-efficient of discharge—relations between them and experimental determination—Drowned orifices, time of emptying tanks through orifices, Losses of head of flowing water due to sudden enlargement, sudden contraction and due to obstruction. Mouth pieces; Cylindrical, Convergent, Divergent, and Borda's.

Flow over rectangular, triangular and trapezoidal notches and over weirs. Velocity of approach. Francis's formula —time of emptying reservoirs with rectangular weirs. submerged weirs,—practical cases. Anicuts with clear overfall, drowned anicuts; head sluices, discharge through bridge openings, afflux and backwater. Designing canal locks.

Fluid friction and flow through pipes—variation of coefficient with velocity and diameter—Froude's and Unwin's experiments—Darcy's formula, hydraulic mean depth, hydraulic gradient, ordinary calculations of size of pipes and volume of discharge. Loss of head due to bends and elbows. Parallel flow through pipes; time of emptying tank through a pipe; transmission of power through pipes; flow through nozzles; hammer blow in pipes.

Flow through open channels; economical section; Chezy, Bazin, Kutter and other formulae. Discharge of measured quantities of water for irrigation purposes; Italian and Spanish modules; other forms of apparatus answering the same purpose. Separating weirs. Variation of velocity in a cross section. Measurement of flow of irregular channels. Standing waves.

Pressure of a jet on a plane surface, fixed or moving. Energy communicated to the moving surface, and efficiency of jet. Velocity of surface for maximum efficiency. Resultant pressure on a curved surface. Direct impulse and re-action. Condition to avoid loss by shock when jet is received. Condition for least loss of kinetic energy when jet is discharged. Propulsion of ships by jet.

Impulse and reaction turbines. The Francis turbine. Mixed flow turbines. Axial flow turbines; the high specific speed turbine. The Pelton wheel. Nozzles; buckets. Design of guide blades and vanes. Cavitation. Modern research on turbine design. Governing, efficiency tests, specific speed, and characteristic curves. Principle of similarity applied to turbines.

Centrifugal pumps.—Design of vanes, centrifugal heads; lowest speed to begin pumping. Specific speed, characteristic curves, principle of similarity, least diameter of impeller, multistage pumps.

Reciprocating pumps; effects of cavitation in reciprocating pumps, diagrams of effective pressure. Methods of driving reciprocating pumps.

Other types of pumps, including the airlift pump and the Shones ejector.

Hydraulic accumulators, intensifiers, lifts, cranes, riveters, presses.

Hydraulic couplings and dynamometers.

## A (XII) APPLIED MECHANICS (Sessional)

Strength of Materials.—More advanced testing of materials.

Hydraulics.—Experiments illustrating Bernoulli's theorem. Experiments on orifices, notches, flow in pipes and channels. Tests on turbines and pumps.

Theory of Machines.—More advanced experiments on machines: balancing.

## A (XIII) PLANNING, LAY-OUT, AND ESTIMATING

(a) Planning & Lay-out.

General considerations and requirements, site and its influence, orientation, local regulations about open space, height, ventilation etc., entrance, exit, stair, lift, sanitary accommodation, electrical equipment. Fire Protection, water supply, and drainage. General specification. Arrangement of work site and equipment, Forms of contract, Arbitration and fees.

(b) Estimating.

General principles of cubing and pricing; standard methods of measurement. Method of procedure,—Taking off, Marking, Headings, Abstracting, Costing,—Reducing, and Billing. Variation and Accounts. Schedule of prices. (Students will have to survey a complete building including steel work, plumbing, electrical installation). General principles of valuation and rental, and cost of land and building. Belting. Leasehold.

## A (XIV) ELECTIVE

### A (a) Rail and Highway Engineering

(*a*) Railways:—

Indian Railways, systems of construction and working. Electric Railways. Gauge.

Earth work and cutting, drainage, land width, ballast.

Various kinds of road crossings—Level, overbridges, underbridges and subways.

Mechanical principles, Resistances—Grade, curve, wind and special. Compensation for curvature. Ruling gradient, superelevation. Tractive force, transition and vertical curves.

Permanent way, rails—different shapes and length, chairs, fishplates and fastenings, sleepers—wooden, metal and reinforced concrete, advantages and disadvantages. Points,

crossings and connected terms, diamond crossings, double slip, single slip. Scissors, Calculations. Creep—its causes and remedies.

Station machinery. Engine sheds, turn-tables, watering arrangements, cabins, weigh bridges etc.

Station buildings and passenger platforms, waiting halls, overhead sheds.

Station yards, simple way-side traffic yards, loco yards, signalling, interlocking, elementary principles.

Selection of new lines, points to be borne in mind—final location and construction, rules of Government of India.

Bridges, impact, erection of girders, arch and reinforced concrete slab bridges, design of railway bridges, codes of practice, welding in bridge work.

Maintenance, accidents, floods, general rules and standard dimensions.

(*b*) Highways:—

Fundamentals of highway engineering—types and properties of the materials employed, location, curves and grades, air port and highway drainage, theory of soil stabilization, design of pavements of both flexible and rigid types and air-port runways.

The determination of the physical properties of subsoil, bituminous and non-bituminous materials of construction, interpretation of test results, specifications, the design of soil and bituminous paving mixtures.

## A (b) Sanitary Engineering

(*a*) Water supply:—

Sources of supply.—Catchment areas; rivers; lakes, springs; masonry wells; tube-wells; rainfall observation; compensation water; gauging streams.

Reservoirs.—Impounding; storage and service reservoirs; water towers; stability of sites.

Quality of water.—Impurities of various kinds, organic and inorganic; chemical and bacteriological examination of water; collection and care of samples; interpretation of analytical reports; hardness.

Water-works.—Intakes; settling tanks; slow-sand filters; mechanical filters; water softeners; iron eliminators; rates of filtration; coagulation apparatus; chlorination apparatus.

Conveyance of water.—Rising mains; distribution mains; strength of different kinds of pipes; loss of head; hydraulic gradient; pressure control and zoning system; house connections; hot water supply; use of meters; use of house and roadside cisterns; valves; expansion joints.

Pumping installations.—General types of installation; steam, oil or electric drive tube-well pumps; house pumps; sewage pumps.

(*b*) Sewerage:—

Sewerage systems.—Combined or separate sewers, their construction and ventilation; self-cleaning velocity; manholes, dumping chutes; interceptor gulley pits; flushing chambers.

House drainage.—Sanitary fillings; traps; soil and anti syphonage pipes; drain testing.

(*c*) Sewage Disposal:—

Refuse removal and disposal.—Reclamation of waste ground; incineration, river pollution and its effects.

The chemistry of sewage.
Disposal by irrigation; sewage farms.
Sea discharge; retention tanks.

(*d*) Purification of Sewage:—

Chemical precipitation; liquefaction of sewage; sewage oxidation, septic tanks; contact beds; trickling filters and distributors; activated sludge process; simplex and bio-aeration processes; mechanical desludging; sludge digestion; utilisation of sludge gas; sludge drying beds; mechanical screening; disposal of septic tank effluent by irrigation, dilution, subsoil galleries, or wells.

(*e*) Surface Drainage:—

Rainfall to be dealt with; selection of outfalls; time of concentration; design of gradients; types of surface drains; "kutcha" and "pucca"; culverts; flood flush drainage and mosquito control.

(*f*) Ventilation:—

The scientific basis of ventilation; industrial pollution of the atmosphere; natural and artificial ventilation; ventilation of auditoriums, factories, mines, air conditioning.

## A (c) Irrigation and Flood Control

(*a*) Irrigation:—

Irrigation by 'Lift and Flow.'

Different methods of Lift Irrigation from wells, tube-wells and rivers by means of man, animal, wind, steam, gas and electric power.

Flow Irrigation.—(a) from rivers by innundation, (b) from rivers, tanks or reservoirs, by means of dams, weirs or barrages. Dams.

Control.—Distribution and regulation of water supply. Losses of water in transit and methods of reducing the same. Duty of water. Measurement of water.

Canal cross drainage works.—Application of Hydro-electricity of Irrigation. Irrigation surveys and projects. Benefits of Irrigation.

River training and control by embankments, spurs, revetments, bell-bunds, dredging.

Flood protection by embankments and reclamation. Effect of tides and floods in Deltaic Tracts. Uses and evils of embankments.

Over-irrigation and its evils. Necessity of drainage in irrigated, deltaic and tidal tracts. Preparation of drainage projects in tidal and upland areas.

Navigation and its importance.—Navigable canals and canalised rivers for tidal and non-tidal areas.

Disposal of cross-drainages.

(b) Flood control:—

A study of the hydraulic factor affecting river flow, the theory of bed load transportation and means of improving rivers as regards flood. Analysis of stream flow data, and frequency and magnitude of flood flows and the effect of reservoirs in reducing them. Elements of design of dams, water-way and power house cost and value of water power and flood control, including flood damages and the selection and planning of reservoirs for flood control.

## A (d) Water Power Engineering

A study of the basic theory of the occurrence and distribution of water on the surface of the earth. Precipitation, run off, infiltration, water losses and their relations, analysis of stream flow data and frequency and magnitude of flood flows and the effect of reservoirs in reducing them.

A study of the problems involved in the location, design, construction and economics of hydroelectric developments as a foundation for practice in this field. Estimates of water power from stream flow data; theory and practice of hydraulic turbines; elements of design of dam, water way and power house; cost and value of water power and flood control; flood damages and the selection and planning of reservoirs for flood control.

N. B.—The course includes the study and design of the various portions of some water power project at a site where actual data are available from surveys and reports. Other general problems of power development should also be considered with their basic theory and practice.

## A (e) Advanced Building Construction and Architectural Design

Advanced Building Construction:—

Modern materials of construction.—Non-ferrous metals and alloys; Plastics; Timber substitutes; Asbestos building boards; Decorative finish,—Plaster, paint, varnish, distemper and spray painting, Modern building fittings.

Construction.—System of construction, false work, steel forms, Distributed foundation, protection of basement wall, sub-soil drains, Ventilation and air conditioning, Heat and

Sound insulation. Fire, and earthquake resisting construction. Ornamental plaster, metal and decorative work.

Architectural Design:—

History of architectural design.—Lectures, briefly summarising the various types of 'Orders,' materials, designs and construction used in:—

(i) Preliminary Classic Styles.
(ii) Greek Architecture.
(iii) Roman Architecture.
(iv) Byzantine and Saracenic Architecture.
(v) Romanesque Architecture.
(vi) Gothic Architecture.
(vii) Renaissance Architecture.
(viii) Indian Architecture.

Principles of Composition.—Unity, mass, contrast in form and mass. Expression of character in design; proportion; scale; Expression of function.

Modern Architectural Design.—Theory of Architecture (Planning, Proportions, etc). Applied Problems in Design.

Drawing.—Perspective Drawing, Freehand sketching.

Modern design and development of residential buildings, public places, factories, libraries, Town halls, Theatres, and Cinemas.

### A (XV) PROJECT AND THESIS (Sessional)

Students will be required to prepare designs in the drawings and estimate for Civil Engineering projects and write reports on the same.

## (B) MECHANICAL ENGINEERING

### B (I) ECONOMICS AND ACCOUNTS

### B (II) APPLIED MECHANICS (Strength of Materials)

The Syllabuses for these subjects are as prescribed for the Civil Engineering Examination (Part II).

### B (III) METROLOGY

Measurement: direct and indirect methods. Standards of length. Scales. Simple measuring instruments: verniers: micrometers—outside, inside, depth gauges. Dial gauges; Minimeters. Feeler gauges. Slip gauges. Length standards and their preparation. Comparators. Measuring machines. Optical methods of measurement. Surface plates and their preparation.

Instruments for measuring angles: the checking of squares; the sine bar: other methods of setting up work at given angles. Precision spirit levels.

Precision measurement of the diameters of holes and of cylindrical plug gauges; also the checking of internal and external tapers. The checking of curved surfaces and templates.

Limits and fits: unilateral and bilateral systems: hole and shaft bases. Standard systems of limits and fits. Limit gauges—inside and outside, fixed and adjustable. Workshop and inspection gauges. Gauge tolerances.

Selective assembly.

Methods of measuring the various elements of a screw thread. Limit gauges for screw threads. The measuring of gear wheel teeth.

Jigs and fixtures—their use, main features of construction, and elements of design.

The production of precision surfaces: heat treatment; warping; growth: grinding: scraping: lapping.

Methods of checking the accuracy of construction and alignment of machine tools.

**B (IV) METROLOGY (Sessional and Practical)**

The use of the various precision instruments and machines mentioned in the lecture syllabus. The checking of instruments and gauges, and the accurate measurement of precision parts of various shapes.

**B (V) ELECTRO-TECHNOLOGY (Paper)**

D. C. machines.—Armature windings—Lap and Wave simple and complex; equalising rings. Detailed study of no load and load characteristics of generators and motors Theory and construction of starters; different methods of speed control of motors. Parallel and series running of generators and motors. Testing—determination of losses, efficiency, temperature rise, insulation etc. Balancers—static and rotary types.

Alternating current.—Comparison of single-phase and polyphase systems; measurement of power in poly-phase systems, solution of problems on circuits by mathematical and symbolic methods; balanced and unbalanced circuits.

Detailed study of alternators and transformers.—E. M. F equation; windings; determination of regulation and efficiency. Induction motors—rotating magnetic field; squirrel cage and slip-ring motors; circle diagram; methods of starting. Main working principles of synchronous motors, rotary converters and mercury arc rectifiers.

**B (VI) ELECTRO-TECHNOLOGY (Sessional and Practical)**

Measurement of self-inductance, mutual inductance, and capacitance. Measurement of flux and hysterisis loss; uses of Siemen's electro-dynamometer and Kelvin's balance for measurement of current, voltage and power. Measurement of insulation resistance of cables.

Determination of load characteristics of D. C. motors and generators. Efficiency tests on D. C. motors and generators. Determination of no-load and load characteristics of alternators, transformers, induction motors and rotary converters. Efficiency tests on alternators, transformers, induction motors and rotary converters. Study of the effects of inductance and capacitance on A. C. circuits.

## B (VII) HEAT ENGINES II

Entropy.—Entropy of gases; changes of entropy under various conditions. Entropy of steam; calculation of changes in entropy of water, saturated steam, and superheated steam. Temperature-entropy and heat-entropy diagrams for steam: various operations on entropy charts. The Carnot and Rankine cycles on entropy charts. Rankine cycle for superheated steam. Application of entropy charts to steam engine problems. .....

Steam consumption.—Indicated weight of steam; missing quantity; transference of indicator diagram on to the temperature-entropy diagram. Relation between steam consumption and power. Condensation. Leakage. Steam jacketing. Superheating.

Multiple expansion engines.—Different types. Calculation of cylinder dimensions; equalisation of piston loads and of work done in the cylinders. Methods of varying the power; valve gears; starting valves. Combination of indicator diagrams.

Theory of the flow of steam through orifices and nozzles. Injectors. Ejectors.

Steam Turbines.—General principles, description, and classification. Calculation of nozzle dimensions: nozzle details. The simple impulse turbine; velocity diagrams, efficiency, and power. Velocity-compounding and pressure-compounding; pressure and velocity curves. Blading; diaphragms; glands; balancing; governing. Turbine losses and efficiencies. The reaction or pressure turbine: theory and mechanical details. Composite turbines. Multi-stage turbines.

Regenerative feed-heating.

Internal Combustion Engines.—Ideal and actual cycles and their efficiencies. Process of combustion; effect of compression; turbulence; pre-ignition; detonation; effect of design of combustion chamber. Fuels; dopes; octane and cetane numbers. Mixture strength; carburation; supercharging. Ignition systems.

Combustion chambers, atomisers, and fuel pumps for compression-ignition engines. Governing.

## B (VIII) HEAT ENGINES III

The testing of power plant: standard methods of tabulating data, readings and results. Testing equipment; modern types of indicators, dynamometers, and steam calorimeters. Analysis of indicator diagrams; detection of faults in engine and indicator. Valve setting. Fuel sampling and testing for solid, liquid, and gaseous fuels; analysis and calorific value. Other properties of liquid fuels. Sampling and analysis of flue gases and exhaust gases.

Heat Transmission:—

Theory of heat transmission: application to feed heaters, air heaters, boilers, and condensers. Cyclical heat flow in engine cylinder walls.

Steam Turbines:—

Exhaust steam turbines. Mixed flow machines. Back pressure and pass-out turbines. Effect of pressure, superheat and vacuum on efficiency.

Binary vapour engines and turbines.

Air Compressors and Motors:—

Transmission of power by compressed air. Simple compressors. Two-stage and three-stage types. Calculation of power, dimensions of cylinders, and efficiency; effect of clearance. Similarly for air motors. Preheating; overall efficiency; mechanical details; Centrifugal and Axial-flow compressors.

Refrigeration:—

Air-compression refrigerators. Vapour-compression machines. Comparison of working fluids; calculation of power required, and co-efficient of performance; rating; testing; mechanical details. Refrigeration on temperature-entropy and heat-entropy diagrams. Absorption machines. The Platen-Munter system. Applications of refrigeration, including air-conditioning.

Internal Combustion Engines:—

Effect of variation of specific heat on efficiency. Entropy diagrams for gases applied to internal-combustion engine problems. Theory of gas-producers. Modern developments in internal-combustion engines.

The gas turbine: history and development; theory and calculations; mechanical details; applications.

Jet propulsion as applied to aircraft.

Rocket propulsion.

Power Plant Management:—

Comparison of different types of prime movers for various purposes in different circumstances, taking into account first cost, running costs, reliability, ease of control, maintenance cost, and depreciation.

Plant lay-out and general arrangement.

Efficient running and care of plant; maintenance of log books and records; running repairs and maintenance; periodic overhauls.

## B (IX) HEAT ENGINES (Sessional)

The testing of steam turbines, including nozzle tests: different arrangements of nozzles and blading in the Impulse turbine.

Analysis of steam engine indicator diagrams: detection of faults: adjustments: valve-setting. Similarly for internal-combustion engines: ignition timing.

The carrying out of comprehensive trials of thermal power plants, and of a refrigerator.

## B (X) APPLIED MECHANICS (Theory of Machines)

Effort, velocity, and acceleration diagrams: application to engines and machines. Inertia of reciprocating parts: crank effort diagrams. Turning moment diagrams. Inertia and kinetic energy of the connecting rod. Cyclical variation of speed: fly wheels. Theory of governors: various types, including spring loaded and shaft governors. Brakes and dynamometers. Belt, rope, and chain gearing. Toothed gearing: epicyclic trains. Hooke's joint: Oldham's and other couplings.

Valves and valve Gears. Stephenson, Gooch, Allen, Hackworth, Marshall, Joy, and Walschaert link motions. Poppet valve gears: oscillating and rotating cam types.

Balancing of rotating parts. Primary balancing of reciprocating parts. Balancing of locomotives. Secondary balancing. Balancing of in-line and radial multi-cylinder engines.

Gyroscopic action. Vibrations. The whirling of shafts. Lubrication and lubricants.

## B (XI) APPLIED MECHANICS (Hydraulics)

## B (XII) APPLIED MECHANICS (Sessional)

The Syllabuses for these subjects are as prescribed for the Civil Engineering Examination (Part II).

## B (XIII) WORKS ORGANISATION AND MANAGEMENT

Different forms of Organisation and Administration. Functions of Administration.

Organisation of Production. Fundamental policy—Single or multiple products—Quality and quantity standards, Capital requirements.

Main Divisions.—Technical, Commercial, Administrative, General structure of Works Personnel. Co-ordination of Functions and Departments.

Selection of Site. Factory layout—General arrangement of Works Power, Plant, Ventilation, Humidity, Equipment, Future extension, Sanitation, Water supply. Detail layout of departments.

Office routine.—Correspondence Office—Wages Office—Cost Office—Time Office—Clock Cards—General arrangement of entrance and exit of workers—Arrangement for payment of wages—Loyalty of Staff—Fitting the staff to their proper jobs.

Design and Development.—Initial planning—Development of new designs—Industrial Designer—Competitive Products—Development by stages.

Drawing Office.—Sizes and numbers—Correct dimensioning with limits where necessary—Sketches—Customer's drawings—Tracings—Prints—Issue of drawings and prints—Amendments—Parts lists—Units and Limits—Standardization—

Drawing Index—Estimating and Ratefixing—Estimator's data —Quotations—Allowance for inefficiency—Costing and estimating systems. Planning and Tooling—Material lists—Buying out vs. manufacturing inside—Indents for purchases—Tool design—Quality of tools—Planning of tools—Interchangeability of tools—Tool Room Programme—Jigs and Fixtures—Bought out tools—Tool Stores.

Buying of materials.—Enquiries—Index of suppliers—Classification of Purchases—Analysis of Purchases—Sub contracting—Contacting suppliers.

Control of materials.—Classification of materials—Stocks of materials—Requisitions—Consumable materials—Storage of materials—Warehousing—Bin Cards—Bin Checking.

Goods received.—Weighbridge—Checking Goods inwards —Goods inward notes—Debit notes—Goods distribution—Contact with material control section.

Control of Production.—Fundamental requirements—Machine Loading Charts—Planning and Programming—Progressing—Progress Schedules—Production or Job Cards—Reject Tags—Rectification—Balancing Production—Scrap disposal—Floor inspectors—Inspection standards.

Production efficiency.—Job Cards—Analysis of lost time—Production chasers—Monthly or daily rate—Piece Work rates —Individual or group bonus—Point systems—Sales bonus—Profit sharing schemes. Labour expenditure—Analysis—Direct and indirect labour—Overtime—Fatigue—Shift work.

Finished Components.—Final Inspection and Packing—Delivery notes—Preferential rates—Transport.

Labour.—Federations and Unions—Works Committee—Welfare.

Holidays.—First Aid and Hospital facilities—Sick Funds.

Insurance.—Works Canteen—Games and Sports—Provident Funds, etc.

Labour Troubles.—General Treatment—Strikes and Lockouts.

Supervisors.—Qualifications and Selection—Fixing grades and Prospects—Advanced training.

Recruitment and training of Superior Staff.

Training of Apprentices.—Theoretical and Practical—General vs. Specialized training—Training records.

Regulations affecting employees—Factory Act—Workmen's Compensation Act—Payment of Wages Act.

Watch and Ward.

Maintenance.—Plant—Machine—Depreciation—repairing vs. replacing.

Overheads.—Overhead expenses and charges—fixed and variable overheads—Works Salaries—Indirect labour.

Analysis and classification of Labour expenditure.

Stock Taking.—Stock Valuating.

## B (XIV) WORKSHOP THEORY

Fitting:—

Fitter's tools; different kinds of chisels, files, scrapers, hacksaws, drills, taps, dies. Marking-off tools. Fitting work.

Machine tools:—

Fundamental principles in the production of machined surfaces. Features of construction, function, and operation of different types of machines: the lathe; capstan and turret lathes; automatic lathes; reciprocating machines—including broaching; drilling and boring machines; milling machines; grinding machines; lapping machines; honing machines. Surface finish and its relationship to accuracy and durability; methods of testing surface finish.

Cutting tools: their profiles, materials, methods of manufacture, and heat treatment.

Speeds, feeds, and cuts.

The planning of machine operations for particular jobs.

Machinability. Heat treatment of work. Case-hardening; nitriding.

Patternmaking and moulding:—

Principles, tools, general methods, materials. Allowances. Relation with moulding. Pattern joints: loose pieces. Coring: core prints: core boxes.

Moulding: general principles. Moulding sands for different purposes: sand preparation: testing. Ramming; venting. Gates, runners and risers. Moulding methods: equipment. Green sand and dry sand moulding. Loam moulding. Moulding machines. Mass production and mechanised methods. Chill-casting. Die casting. The cupola; melting; pouring. Grades of cast iron: testing. Non-ferrous moulding.

Forging:—

Equipment; materials: methods. Effect of forging methods on physical properties and structure. Flow of metal. Correct and incorrect fibre direction. Annealing and normalising.

Rolling. Extruding. Sheet metal work.

Welding:—

Forge welding; water gas welding; fusion and thermit welding; electric arc and resistance welding; oxy-acetylene welding; atomic hydrogen welding.

## B (XV) DRAWING AND DESIGN

The design of engine, boiler, and machine parts and assembly units, with reference to economical manufacture as well as to strength of the parts.

## B (XVI) ELECTIVE

### B (a) Production Engineering

Different kinds of production: job work; quantity production to order; mass production to stock: corresponding staff,

equipment and methods required. Relation between design and production.

Production planning: job analysis: operation sheets: motion study: time study: rate-fixing.

Production-estimating and costing.

Methods of payment of wages. Payment by results.

Progress organisation in different circumstances. Methods of ensuring that men and machines are fully occupied. Job cards. Progress sheets, charts, and control boards. Procedure in special circumstances, such as breakdown of machines, rejection of parts.

Tool design, manufacture and storage.

Jig, fixture, and gauge design, and methods of manufacture.

Material control. Stores organisation: necessary books and forms.

Manufacture: detail organisation of departments and sections: co-ordination of departments.

The progress of an order, from its receipt to final completion.

## B (b) Machine Tools

Fundamental principles in the production of machined surfaces. Features of construction, function, and operation of different types of machines. The lathe: capstan and turret lathes; automatic lathes. Reciprocating machines. Broaching. Drilling machines. Milling machines. Gear cutting machines. Grinding and grinding machines. Lapping and lapping machines. Honing machines. Surface finish, and its relationship to accuracy and durability: methods of testing surface finish.

Cutting tools: their profiles, materials, methods of manufacture, and heat treatment. Speeds, feeds, and cuts.

The planning of machine operations for the production of particular jobs. Production estimating. Selection of quickest and cheapest operations.

Considerations affecting the design of various machine tools with reference to their purpose; strength, rigidity, absence of vibration, accuracy.

Methods of checking the accuracy of construction and alignment of the various parts of machine tools.

## B (c) Automobile Engineering

Fundamental principles of the internal combustion engine. The development of the high-speed multi-cylinder petrol engine: modern types. Mechanical details: cylinders, pistons, connecting rods, crankshafts, bearings, crank-case, cooling systems, valves and valve mechanisms, cylinder heads and combustion chambers. Carburation, carburettors, and induction systems. Supercharging. Ignition systems: magnetes, battery and coil. Valve and ignition timing. Exhaust systems: silencers. Lubrication.

The development of the high-speed multi-cylinder oil engine. Mechanical details: injection systems; combustion chambers.

Lighting and starting systems: batteries.

Transmission: different arrangements of drive and positions of the engine. Clutches: fluid transmission. Gearboxes; different types. Universal joints and propeller shafts. Back axle and differential gear: details of transmission to wheels. Front axle: steering gear: independent suspension: front wheel drive. Springs and shock-absorbers. Chassis-frames: integral construction. Brake systems. Chassis lubrication. Tyres and tubes. Bodywork.

Care and maintenance of the various units. Fault-finding.

Overhaul: light and heavy repairs of the different assembly units.

Elements of automobile design.

## B (d) Refrigeration and Air Conditioning

(i) Refrigeration:—

Physical properties of low temperature insulants; heat transfer through typical walls of cold storage plants, refrigerator cars, and refrigerator ships; moisture and temperature conditions necessary for the preservation of the important foods; the microbiology of food stuffs, the nature of their ripening and spoilage, the impurities of the atmosphere. Low temperature refrigeration. A study of the operations of the various types of compressors, evaporators, condensers, and automatic controls used in commercial refrigeration systems. Heat flow problems in condensers and evaporators. Theory and calculation of size of cooling towers. The application of refrigeration in the manufacture of water ice, and dry ice.

Storage and transportation of food stuff.

A study of the thermal, physical, and toxic properties of the chief refrigerants. A discussion of the time required to freeze ice. Application of refrigeration to skating rinks, shaft sinking, petroleum, breweries, and the manufacture of ice cream.

(ii) Air Conditioning:—

Study of ventilation and the fundamentals of air conditioning. A study of the psychrometric and comfort data with application to air conditioning problems. Applications of typical air conditioning equipment to various types of problems.

Requirements in different circumstances: dwelling houses; offices; factories; trains; ships; aircraft. Structural requirements: specially designed buildings: modifications to existing buildings.

## B (XVII) PROJECT AND THESIS (Sessional)

Designs, working drawings and estimates for a complete set of machinery such as:—a steam engine; an internal-combustion engine; a turbine; a pump, an air compressor; a lathe; a refrigerating machine.

## (C) ELECTRICAL ENGINEERING

### C (I) ECONOMICS AND ACCOUNTS

### C (II) APPLIED MECHANICS (Strength of Materials)

The syllabuses for these subjects are as prescribed for the Civil Engineering Examination (Part II).

### C (III) HEAT ENGINES II

The syllabus for this subject is as prescribed for the Mechanical Engineering Examination (Part II).

### C (IV) HEAT ENGINES II (Sessional)

Continuation of Heat Engines I (Sessional). More comprehensive testing of internal-combustion engine-and steam power plants.

### C (V) MATHEMATICS

1. Differential Equations of Electrical Engineering Problems. Use of complex variables.

2. Vector Analysis as applied to Electrical Engineering Problems.

3. Fourier Series and Harmonic Analysis. Analysis of E.M.F. and current waves—Application of Fourier Series to Engineering Problems. R.M.S. value of a periodic function.

4. Flow of Electricity in cables. Telephone Equation, Telegraph Equation, Radio Equation, Attenuation Constant.

5. Mathematical Theory of Electricity and Magnetism. Electrostatic field of force—Theorems of Gauss and Maxwell—Lines and Tubes of Force. Laplace's and Poisson's Equations. Distribution of charge on Spheres and Cylinders, capacity of Condensers. Differential Equations of Induction. Production of Eddy Currents. Electromagnetic Waves.

6. Operational calculus and its application to Electric circuits.

### C (VI) ADVANCED ELECTRO-TECHNOLOGY

D. C. machines.—Armature windings—Simple, complex, lap and wave windings, equalising rings, Cross magnetising and demagnetising action of armature re-action; effects of commutation, reactance voltage; compensation of armature reaction and commutation—brush shifting, use of interpoles and compensating windings. Detailed study and comparison of load characteristics of D. C. motors and generators; losses and efficiency of D. C. machines. Starting and speed control of motors—construction and design of starters; different methods of speed regulation and their relative merits. Separation of losses in D. C. machines. Comparison of two-wire and three-wire D. C. systems—use of static and rotating balancer. General principles of illumination.

Alternating current.—Complex circuits—mathematical and symbolic methods of solving circuit problems. Comparison of single and polyphase systems. Measurement of power of single phase and polyphase circuits—three volt-meter, three ammeter and two wattmeter methods. Balanced and unbalanced polyphase circuits. Production of rotating magnetic fields, induction of rotational and pulsational E. M. F's. Alternators—E. M. F. equation, breadth co-efficient, different types of windings, construction of poles and their effects on performance, determination of efficiency and regulation, main principles of parallel operation. Transformers—Primary and secondary turns, E. M. F., current and ampere-turns; Equivalent resistance, reactance and impedance; construction of magnetic and copper-parts, methods of cooling; ordinary, auto and scott transformers; determination of efficiency and regulations—Open circuit and short-circuit tests. Induction motors—Squirrel cage and slip-ring type, behaviour of motor at rest and under running conditions; open and short circuit tests—circle diagram and slip-torque diagram. Starting of induction motors—Auto-transformer, star-delta and rotor resistance methods. Synchronous motors—working under load and no-load conditions, methods of starting, power factor improvement. General principles of working of rotary converters, motor converters, rectifiers and commutator motors.

## C (VII) ELECTRICAL MACHINES (Paper)

Systems of supply.—High and low tension generation; D. C. and A. C. Single or polyphase—3 or 4 wire systems Selection of sites for central stations—availability of water, fuel, transport and labour. Design and construction of Power House buildings. Determination of load and its economic division. Comparative study of water turbine and steam turbine drives: use of steam engines, steam turbines, crude-oil engines, and diesel engines. D. C. and A. C. generating units. Voltage regulation, parallel operation, synchronising of alternators. Use of transformers for step-up and step-down voltages and for parallel operation. Conversion plants—Rotary converters, motor converters and mercury arc rectifiers. Indoor and out-door sub-stations. Design and construction of switchboards for central stations and sub-stations. Battery sets—installation and maintenance.

## C (VIII) ELECTRICAL MACHINES (Sessional)

More detailed study of Induction motors, alternators, synchronous motors, rotary converters, traction motors, commutator motors and mercury arc rectifiers. High-tension testing—Insulation tests, breakdown and minute valves; flash-over tests on insulators; dielectric loss measurements.

## C (IX) SWITCHGEARS AND INSTRUMENTS

Detailed study of measuring instruments for D. C. and A. C. circuits—theory, construction, and application for different

installations. Connection of ammeters, voltmeters, energy-meters on the different panels of power-stations and sub-stations. Instrument transformers, Power-factor meters, frequency meters, synchroscopes, etc., for A. C. switchboards. Precision measurements—A. C. bridges and potentiometers. Use of oscillographs and ondographs. Knife-switches, air-break and oil-immersed circuit breakers; maximum, minimum and reverse current relays for D. C. and A. C. systems. Design and construction of air and oil circuit breakers. Grouping of switch-gear, etc., together with use of reactance coils. Calculation of K. V. A. rupturing capacity of circuit breakers required for typical networks. Protective devices for generating plants and transmission lines. Remote control gears and automatic devices.

## C (X) SWITCHGEARS AND INSTRUMENTS (Sessional)

The use and care of the standardising instruments. Measurement of alternating current power and method of determining phase difference. Precision measurements: A. C. potentiometers. Testing of electrical instruments to be used for power plants. Instrument design. Testing of different types of switchgear and protective devices. Use of oscillographs—Study of wave forms, and harmonic analysis.

## C (XI) APPLIED MECHANICS (Hydraulics)

## C (XII) APPLIED MECHANICS (Sessional)

The Syllabuses for these subjects are as prescribed for the Civil Engineering Examination (Part II).

## C (XIII) WORKS ORGANISATION AND MANAGEMENT

The syllabus for this subject is as prescribed for the Mechanical Engineering Examination (Part II).

## C (XIV) TRANSMISSION AND DISTRIBUTION OF ELECTRIC POWER

Systems of transmission and distribution.—D. C. two-wire and three-wire systems; A. C.—Single-phase and poly-phase systems; voltage regulation and transmission efficiency. Mechanical and electrical considerations of underground and overhead high voltage lines. Disturbances and protective devices; power factor correction.

Advanced dielectric theory in high voltage technics. High voltage cables. Self and mutual capacity co-efficients and reduction co-efficients of overhead transmission circuits. Interaction of feeders. Effect of ground wire. Interference on telephone and other lines. Voltage regulation of long lines. Sag and tension on inclines. High Voltage insulators for transmission circuits. Travelling waves and pulses. Reflection at transition points.

## C (XV) PLANNING AND DESIGN OF POWER SYSTEMS

Electrical survey of area for electrification. Load survey including possibilities of expansion both residential and industrial. Location of power station and sub-stations. Design and calculation of the number, capacity, type and voltage of the generating units and converting plants, necessary switchboard panels, switchgears, feeder cables and protective gears. Design and calculation of transmission and distribution lines—overhead wires or underground cables. Design and calculation of the Electrical machines required for the scheme.

## C (XVI) ELECTIVE

### C (a) Electrical Communication

(i) Line telegraphy.—Simplex and multiplex systems—Duplex and Quadruplex telegraphy—Differential and Bridge Duplex. Morse system—Sounder and inker. Telegraphic circuits—Open and closed circuits; single and double current working; polarised and non-polarised relays; direct and indirect working. Automatic telegraphy—Wheatstone's apparatus and Baudot and Bain's system; Hughes's type printing system. Duplex multiple system.

Line telephony.—Manual and automatic telephony—Transmitters and receivers; different types of manual exchanges—magneto and central battery systems. Subscriber's apparatus circuits, cord circuits and switchboard appliances at manual exchanges. Automatic exchanges. Protection of telephone lines from electric disturbances and inductive interference. Main and trunk exchanges.

(ii) Wireless communication.—Laws of oscillating circuits—high frequency oscillations; electro-magnetic waves and their application in wireless communication; spark telegraphy and continuous wave telegraphy; thermionic valves and their applications; radio-telephony and broadcasting, long and short wave transmission; transmitters and receivers for telephony; broadcasting stations and receiving sets; construction of transmitter and receiver sets.

### C (b) Electric Traction

Mechanics of train movement.—Study of speed-time curves and energy consumption; D. C. traction motors; single-phase and poly-phase traction motors; control of D. C. tramway and railway motors; control of A. C. single phase and polyphase motors, regenerative braking; track construction for tramways and railways; overhead construction for tramways and railways; feeding and distributing systems for tramways and railways; sub-stations, including conversion plants for tramways and railways.

### C (c) Illumination Engineering

Quantities, units and relations employed in illumination such as lumen, candle-power, foot-candle, etc. Theory and

use of typical measuring devices—precision and standard photometers, integrating spheres, reflectometers, Calculation of illumination from point, line and surface sources of light exhibiting typical space distribution of light; light-flux output of symmetrical distribution source; calculations regarding light in an enclosure, utilization co-efficient, point by point and flux-of-light method of illuminating interiors. Laws of vision affecting lighting; characteristics of lamps, reflectors; glare and shadow. Industrial, office, school and residence lighting. Selection and application of equipment, design of circuits, study of methods of installation for power supply to lamps. Design and performance of lamps, reflectors, refractors, diffusers and other controlling devices for economic illumination consistent with visual effectiveness. Special illumination such as flood-lighting, window display, neon lighting for cinemas and publicity posters, etc.

### C (XVII) PROJECT AND THESIS (Sessional)

This will consist of an actual project of electrification including power stations, sub-stations, switchboards, overhead and underground lines, etc., also designs and calculations for one A. C. machine and one D. C. machine with complete working drawings.

## (D) METALLURGICAL ENGINEERING

### D (I) ECONOMICS AND ACCOUNTS

The Syllabus for this subject is as prescribed for the Civil Engineering Examination (Part II).

### D (II) REFRACTORIES, FURNACES, AND FUELS

**(Paper)**

Refractory materials:—

Acid, basic and neutral refractories. Physico-chemical properties that enable them to resist erosion, high temperature, changes of temperature and action of molten metal and slag. Study of expansion, contraction, specific heat, porosity, permeability, thermal and electric conductivity of refractories. The preparation of refractory materials and their uses in the manufactures of fire-bricks, crucibles, retorts and for lining furnaces.

Furnaces:—

Classification of furnaces. Design, construction, operation and application of different types of metallurgical and industrial furnaces.

Fuels:—

The chemical composition, calorific power and general uses of fuels. Combustion, calculation of volumes and weights of

air necessary for combustion of fuels. Calculation of heat loss, Conditions necessary to ensure heat efficiency of furnaces.

Solid fuels:—

Wood and charcoal. Coal, its origin, nature and classification. Characteristics and distribution of Indian coals. Destructive distillation of coal at high and low temperatures. Manufacture of Metallurgical coke and recovery of by-products

Pulverised coal and coal briquettes.

Liquid fuels:—

Petroleum and their distillation products. Coal tars and their distillation products. Shale oil. Products of hydrogenation of coal.

Gaseous fuels:—

Producer gas, semi-producer gas, water gas, Mond gas, blast furnace gas. Their manufacture, composition and calorific values. The chemical reaction and thermal changes involved in gas production.

Calorimetry:—

Types of calorimeters for estimating the calorific values of solid, liquid, and gaseous fuels. The bomb calorimeter.

## D (III) REFRACTORIES, FURNACES, AND FUELS

**(Sessional)**

The course includes testing of fuels, flue gases and refractories and making sketches of different types of kilns, ovens and furnaces.

## D (IV) INORGANIC AND PHYSICAL CHEMISTRY

**(Paper)**

Inorganic chemistry:—

Preparation and systematic study of the following elements and their technically important compounds with special reference to their application in metallurgy: Hydrogen, Lithium, Sodium, Potassium, Beryllium, Magnesium, Calcium, Strontium, Barium, Radium, Boron, Aluminium, Zinc, Cadmium, Mercury, Copper, Silver, Gold, Carbon, Silicon, Tin. Lead, Nitrogen, Phosphorus, Oxygen, Sulphur, Chlorine, Bromine, Iodine, Arsenic, Antimony, Bismuth, Iron, Nickel, Cobalt, Selenium, Tellurium, Chromium, Helium, Neon, Argon, Krypton, Xenon, Niton, Titanium, Vanadium, Manganese, Molybdenum, Ruthenium, Rhodium, Palladium, Platinum, Cerium, Thorium, Tantalum, Tungsten, Osmium, Irridium, Uranium.

Elements of crystal structure, Artificial Radio-activity, Werner's Co-ordination theory and the ammines, Persulphates,

Percarborates, perchromates, Hydrides, Carbides, Nitrides, Carbonyls, Hydrozine, Hydroxylamine, Fixation of Nitrogen, Corrosion of metals and alloys and its prevention.

Physical Chemistry:—

Properties of gases and liquids; Avogadro's hypothesis; Kinetic theory; Properties and laws of solution; Law of mass action; Chemical equilibrium in homogeneous system, The Phase rule; Equilibrium in heterogeneous system; Colloids; Velocity of reaction; Catalysis; Theory of electrolytic dissociation and its application; Law of conservation of energy: Thermochemistry: Second law of thermodynamics and its application to chemical reactions: Clausius—Clapeyron equation: Joule-Thomson effect: Relation between chemical and electrical energy; origin of E. M. F. in primary, secondary and concentration cells; Theory of electrolytic corrosion: principles of electro-analysis and electrometric titration; Thermodynamical study of technical gas reactions.

## D (V) INORGANIC AND PHYSICAL CHEMISTRY (Sessional and Practical)

Inorganic Chemistry:—

Estimation of Iron, Copper, Lead, Tin, Zinc, Nickel, Manganese, Chromium, Antimony, Silver, Magnesium, Chloride, Sulphate and Phosphate by wet method.

Separation and estimation of a mixture containing:—
Iron and Aluminium, Iron and Manganese, Calcium and Magnesium, Copper and Zinc, Copper and Nickel, Iron and Nickel.

Detection of metals present in Alloys, Ores, Fluxes and Slags both by ordinary and micro methods.

Physical Chemistry:—

Molecular weight determination by Victor Meyer's vapour density method; Molecular weight determination by freezing point method; Distribution of a solute between two non-miscible solvents; Investigation of homogeneous equilibrium—Hydrolysis of methyl acetate; Conductivity of electrolytes—Determination of cell constants; Preparation of standard half elements and determination of decomposition potential of salts; Electrometric titrations by oxidation—reduction methods Electrometric titrations by precipitation method; determination of hydrogen in concentration and acid alkali titration: calorimetry and the use of bomb calorimeter; Determination of transition temperation of salts and alloys by dilatometer.

## D (VI) GEOLOGY, MINERALOGY, AND DRESSING OF MINERALS (Paper)

Physical Geology.—A general view of the earth. Denudation by the weather, rivers, glaciers and the sea; transportation and deposition of detritus; consolidation of detritus. Lami-

nation, stratification. Volcanoes and volcanic products. Mode of occurrence of igneous rocks: dyke, sill, neck, laccolith, phacolith, stock, batholith. Results of earth movements: formation of basins, domes, folding, over-folding: dip, strike, out-crop; normal and reversed faults. Rock cleavage, joints, metamorphism; thermal, dynamic and regional metamorphism.

Petrology.—Classification, character and essential constituents of the more important igneous rocks. Sedimentary rocks—characteristics: Mode of origin and classification; General description of different sedimentary rocks.

Metamorphic rocks.—Characteristic structures. General description of commoner kinds of metamorphic rocks.

Palaeontology.—Fossils, their mode of preservation: rocks in which they occur. Importance of fossils in stratigraphical geology.

Stratigraphical Geology.—Leading principles of stratigraphy. A general outline of Indian stratigraphy.

Crystallography.—Symmetry: Crystallographic arcs. Indices; Systems and Forms; Reading and drawing of crystals.

Mineralogy.—Physical properties of minerals in general.

Description of the following mineral species:—

Native elements—Diamond, Graphite, Gold.

Ore Minearls—

Aluminium—Bauxite.

Antimony—Stibnite.

Chromium—Chromite.

Copper—Chalcopyrite, Bornite, Chalcocite, Cuprite, Malachite, Azurite.

Iron—Magnetite, Hematite, Limonite, Siderite.

Lead—Galena, Cerussite.

Magnesium—Magnesite.

Manganese—Psilomelane, Braunite, Pyrolusite.

Mercury—Cinnabar.

Nickel—Pentlandite, Garnierite, Niccotite, Nicheliferrous, Pyrrhotite.

Silver—Argentite, Pyrargyrite, Proustite.

Sulphur—Pyrites.

Tin—Cassiterite.

Tungsten—Wolframite, Scheelite.

Zinc—Sphalerite, Smithsonite.

Refractory Minirals—Quartz, Kaolinite, Magnesite, Chromite, Graphite, Bauxite, Silimanite, Kyanite.

Oxide—Quartz, Corundum.

Carbonates—Calcite, Dolomite, Magnesite.

Sulphates Gypsum, Barytes.

Phosphates—Apatite.

Silicates—Feldspar group, Feldspathoid group, Pyroxene group, Amphibole group, Olivine, Muscovite, Biotite, Talc, Serpentine.

Halides—Fluorite, Cryolite.

Economic Geology—Form of mineral deposits. Origin and classification of mineral deposits: Enrichment of ore deposits: Coal, Petroleum, clay and economic mineral deposits in India.

### Dressing of Minerals

Purpose and advantage of separating gangue material from valuable minerals and one mineral from another. Properties made use of in separation. Concentration by hand picking and sorting. Breaking, crushing and grinding mills. Sizing, classification. Water concentration. Flotation concentration. Magnetic, electrostatic, pneumatic and centrifugal separation. Percentage recovery, ratio of concentration and enrichment. Flow-sheets.

## D (VII) GEOLOGY, MINERALOGY, AND DRESSING OF MINERALS (Sessional)

Determination of physical properties of minerals. Identification in the laboratory of minerals studied during lectures. Demonstration of methods of ore microscopy and preparation of polished sections of ore minerals. Megascopic determination of rocks. Separation of one ore mineral from another by means of laboratory size ore dressing equipments. Making sketches of ore dressing plants.

## D (VIII) ELECTRICAL ENGINEERING

D. C.—Armature windings of D. C. machines. Detailed study of characteristics of generators and motors. Parallel running of generators and motors. Speed control of motors. Testing of D. C. machines. Balancers.

A. C.—Comparison of single-phase and poly-phase systems; measurement of power of poly-phase systems; mathematical and symbolic method of solving A. C. circuits problems; balanced and unbalanced circuits.

Detailed study of alternators and transformers.—E. M. F. equation; windings; determination of regulation and efficiency. Rotating magnetic field. Induction motors—squirrel cage and slip-ring types; methods of starting. Main principles of working of synchronous motors and converters and mercury arc rectifiers.

Electric Furnaces—Furnaces for ferrous and non-ferrous metals. Different types of furnaces—Resistance furnaces;

Arc Furnaces; Induction-furnaces—Low and High frequency types. Use of transformers of various types for furnaces. Furnace conductors and connections. Resistors and Electrodes for electric furnaces. Principles of design of electric furnaces.

## D (IX) METALLURGY OF IRON AND STEEL

Occurrence and distribution of iron ores. Iron ores of India. Preparation of iron ores. The blast furnace and its accessories. Smelting of iron ore in the blast furnace. Chemistry of smelting; calculation of blast furnace charge. The advantage and necessity of preheating air blast. The evil effect of too much moisture in blast. Effect of furnace charges and conditions of working on the composition of pig iron. Blast furnace products. Composition and grading of pig iron. Influence of different constituents on the properties of pig iron. Manufacture of sponge iron. Manufacture of spiegeleisen, ferro-manganese and ferro-silicon in the blast furnace. Foundry cupola, chilled and maleable castings. Methods of manufacture, properties and uses of wrought iron.

Production of tool steels by cementation and crucible processes. Grading of tool steel. Manufacture of steel by Bessemer, open-hearth, modified open-hearth, duplex and electric processes. Chemistry (including thermo-chemistry) of the processes of steel making. Comparative study of the various steel-making processes. Considerations to be taken into account in the selection of a process. Manufacture of iron and steel in ancient India. Methods of making alloy steels. The study of foundry and steel castings. Influence of carbon and other elements on iron. Case-hardening of steel. Welding. Corrosion and methods of protecting iron from corrosion, including galvanizing, tinning, etc.

(N. B.—In the treatment of this subject the methods that are in operation in India will be dealt with more fully.)

## D (X) METALLURGY OF NON-FERROUS METALS

Gold—The ores of gold. Preliminary treatment and processes of extraction. Parting of gold and silver. Refining. Alloys of gold. Standard gold.

Silver—The ores of silver. Preliminary treatment and extraction. Cupellation. Refining. Alloys of silver. Standard silver.

Copper—The ores of copper. Smelting in reverberatory and blast furnaces. Pyritic smelting. Calculation of furnace charge. Constitution of copper matte. Bessemerizing of copper matte in different types of converters. Wet method of extraction. Furnace and electrolytic refining of copper. Chief alloys of copper.

Nickel—The ores of nickel. Methods of extraction and refining. Grain, cast and maleable nickel. Chief alloys of nickel.

Lead—The ores of lead and their smelting. Softening of hard lead. The Pattinson and Parkes processes of desilverisation of lead. The chief alloys of lead.

Tin—Dressing and separation of tin ores from wolfram, etc. The smelting of tin ores and refining of tin. Treatment of the rich slag. The alloys of tin.

Zinc—The ores. Extraction and refining of zinc. Chief alloys of zinc.

Antimony—Softening of antimony ores and refining of the metal. Alloy of antimony. Elementary treatment of the metallurgy of Cadmium, Mercury, Manganese, Chromium, Beryllium, Tungsten and Platinum.

The chief physical, mechanical and chemical properties as well as the uses of the above metals.

Methods of recovering non-ferrous metals from alloys and scrap as secondary metal. Powder metallurgy.

(N. B.—In the lectures on this subject the methods that are in operation in India will be treated more fully.)

## D (XI) ASSAYING AND METALLURGICAL ANALYSIS (Paper)

The necessity and importance of securing a representative sample for analysis. Conditions on which this depends. Hand sampling and mechanical sampling. Common methods of sampling coal, ores, metals, etc.

Lectures will be given to explain the principles underlying the analyses and assays prescribed for the Practical Course.

## D (XII) ASSAYING AND METALLURGICAL ANALYSIS (Sessional and Practical)

The fire assay of the ores of gold, silver, lead and tin, and gold and silver bullion. Making of common non-ferrous alloys in a crucible furnace in the laboratory, and their analysis. The complete analysis of refractories in the ferrous and non-ferrous alloys, ores, mattes, slags and other metallurgical products.

## D (XIII) WORKS ORGANISATION AND MANAGEMENT

The syllabus for this subject is as prescribed for the Mechanical Engineering Examination (Part II).

## D (XIV) ELECTRO-METALLURGY AND MECHANICAL WORKING AND TESTING OF METALS (Paper)

(a) Electro-metallurgy:—

Theoretical principles underlying electro chemistry.

Extraction on refining of the following metals by electrolytic methods:—

Sodium, Potassium, Calcium, Magnesium, Aluminium, Copper, Zinc, Iron, Nickel, Lead, Gold and Silver. Principles of electroplating. The electro-thermal process of reducing iron from its ores. Various types of electric furnaces used in metal industry. Processes of making steel, alloy steel and ferrous alloys in electric furnaces. Electrodes, economizers, electrical connections and control. Electric welding.

(*b*) Mechanical working and testing of metals—

Defects of cast metal. The need for mechanical working. The flow of metals. Effect of composition and impurities. Cold and hot working. Cold and red shortness. Temperature of working.

Various methods of working metals, *viz.*, rolling, forging by hammer and press, drop-forging, stamping, extrusion, etc.

Mechanical properties of metals and how they are tested.

Typical standard specification of important industrial metals and alloys.

Inspection of defects and flaws in metals.

## D (XV) MECHANICAL WORKING AND TESTING OF METALS (Sessional)

Procurement and preparation of test pieces. Calibration of tensile testing machine. Use of Extensometer. Carrying out of tensile, compressive, hardness, impact, torsion, shear and fatigue tests. Study of different types of fracture and their significance. Corelation between test results and changes of structure due to heat and mechanical treatment as well as orientation of grains.

## D (XVI) METALLOGRAPHY, HEAT TREATMENT AND PYROMETRY (Paper)

*Introduction*—Crystal-structure and Micro-structure of metals. Relationship between composition, constitution, structure, and properties. Crystallisation and melting of metals and alloys. Heating and cooling curves. Thermal equilibria in Metallic systems, under-cooling, Systematic study of the various types of equilibrium diagrams. The phase rule and its application to metallic system.

The grinding, polishing and etching of Metallic sections. The optics of Metallographic Microscope. Importance of both thermal and microscopic methods in the study of the constitutional and structural changes of metals and alloys. Dilatometric and other methods.

Crystallisation of pure metals, solid solutions, eutectics, eutectoids and compounds from liquid and solid solutions and characteristics of their micro-structure. Effect of rate of cooling; inhomogeneity; diffusion.

Detailed study of iron-carbon equilibrium diagram. Modification of the diagram on the addition of Mn, Ni, Cr, etc. Structure of wrought iron, steel, cast iron and alloy steels.

Equilibria in the more industrially important non-ferrous systems such as Copper-Zinc, Copper-Tin, Copper-Silver, Copper-Aluminium, Aluminium-Silicon, Aluminium-Magnesium, Lead-Antimony, Lead-Tin, Tin-Antimony, etc. Effect of heat treatment on transformation and structures. Hardening of steel and structures of hardened steel. Effect of rate of cooling on structure. Characteristics of transformation at constant temperature.

Precipitation from solid solution: Age-hardening; Quench-aging; Strain-aging, Temper brittleness; Plasticity of metals; Cold work; Annealing and recrystallisation. Heat treat of Duralumin and other non-ferrous alloys. Pyrometry—Air thermometer, thermo-electric couples, the electric resistance thermometer, radiation and optical pyrometers, seger cones, calibration of pyrometers. Determination of freezing and melting points and phase changes in the solid condition. Methods of plotting curves.

## D (XVII) METALLOGRAPHY, HEAT TREATMENT AND PYROMETRY (Sessional and Practical)

Standardisation of pyrometers. The thermo-electric method of determinaton of freezing point-curves, and critical points in the solid state by means of potentiometer. Types of industrial pyrometers and their use. Microscopic examination of metallic sections. The preparation of micro-sections. The use of the microscope in the examination of metals and alloys. Systematic examination of the micro-structures of metals including pure metals, wrought iron, steels, alloy steel, cast iron, brasses, bronzes, antifriction metal, zinc-aluminium alloys and other important industrial alloys. Photomicrography.

The effect of rate of cooling, normalizing, annealing, quenching, tempering. and presence of inclusion on the microstructure and mechanical properties of metals and alloys.

## D (XVIII) ELECTIVE

### D (a) Advanced Metallurgy of Alloy Steel

Manufacture, production and uses of ferro-silicon, ferro-manganese, ferro-chromium, ferro-tungsten, ferro-molybdenum, ferro-vanadium, ferro-phosphorus, ferro-titanium and alloy cast iron.

Manufacture and composition of alloy steel containing:— (1) Single alloying element such as nickel, chromium, molydenum, tungsten, vanadium, silicon, manganese; (2) Two alloying elements such as nickel-chromium, chromium-molybdenum, chromium-vanadium, silicon-manganese, nickel-molybdenum, nickel-vanadium, manganese-chromium, manganese-molybdenum, manganese-vanadium, and molybdenum-vanadium; (3) Three alloying elements such as nickel-chromium-molybdenum, manganese-chromium-vanadium, manganese-chromium-molybdenum, and manganese-nickel-vanadium. (4) High tensile

structural steel and (5) Special steels such as corrosion and heat resistant steels, stainless steels, high speed steels and other cutting materials, ferro-magnetic steels, alloy case-hardening and nitriding steels, cutting alloy steels.

Fabrication, heat treatment and metallography of the above steels.

### D (b) Advanced Metallurgy of Non-Ferrous Alloys

Detailed study of the chief non-ferrous alloys used in engineering, arts and industries including various kinds of brasses, bronzes, type metals, anti-friction metals and light alloys based on aluminium and magnesium. Production of castings and die-castings of non-ferrous metals. Different methods of working non-ferrous metals such as forging, stamping, rolling, drawing and extruding. Cold work and grain growth. Heat treatment of non-ferrous alloys with special reference to precipitation hardening alloys like duralumins. Surface treatment of aluminium and magnesium and alloys based on them. Physical and chemical methods for the production of metal powders. Pressing and annealing of metal powder and study of diffusion, recrystallization and grain growth due to these operations. Application of powder metallurgy. Metallography of the principal non-ferrous binary and ternary systems. Formation of intermetallic compounds and order and disorder in non-ferrous alloys. Secondary metals.

### D (c) X-ray Crystallography and Spectroscopy of Metals and Alloys

*X-ray Crystallography—*

Continuous and characteristic spectrum. Moseley's Law. Absorption of X-rays. Filtering. Scattered radiation. X-ray tubes for diffraction and radiographic purposes. Photographic efficiency of X-rays.

*The fundamentals of crystallography—*

The diffraction of X-rays by crystals: Bragg's Law; Interplanar spacings; Relation of atomic arrangement to Diffraction Pattern; Relation of atomic arrangement to Diffracted Intensities; The Structure factor equation. X-ray Diffraction methods: The Laue method; The rotating crystal method; The powder method.

*Examples of structure determination—*

The structure of metals and alloys: Structure of elements; Solid solutions; Intermediate Phases; The structure of Liquid metals; Superlattices; Plastic deformation of metals; Structure of cold-worked metals. Preferred orientation resulting from cold work; Preferred orientation after recrystallisation; Orientation in castings; Determination of flaws by X-rays.

(*ii*) *Spectroscopy—*

The fundamental principles of spectroscopy. The types and practical uses of prism spectroscopes and spectrographs. In-

fra-red spectroscopy. Spectroscopy of the ultra violet. The vacuum grating spectrograph.

The practical analysis, both qualitative and quantitative, of representative metals, minerals and ores, etc.

This course will also include a few lectures on the application of the Electron Microscope to the study of metallographic problems.

N.B.—The lectures will be as far as practicable illustrated by practical demonstration in the classes and laboratories.

## D (XIX) PROJECT AND THESIS (Sessional)

The work will consist of either an investigation on a Metallurgical problem or a design, working drawings and estimate for a Metallurgical Plant or Machinery.

14. Candiates appearing in the Bachelor of Engineering Part II Examination may also be examined, if they so desire, in Applied Mathematics as an additional subject, carrying 100 marks. Such candidates, however, will receive credit only for the number of marks they obtain in this subject over and above 40 marks which are the pass marks.

15. The limits of the subject shall be as follows:—

## APPLIED MATHEMATICS

Statics:—Vectors. Various kinds of forces. Parallel forces and centres of gravity. Conditions of equlibrum of coplanar forces. Funicular polygon. Principle of virtual work. Stable and unstable equilibrum. Deflection in a framed structure. Catenary. Suspension bridge. Simple cases of forces in space. Engineering applications.

Dynamics of a Particle:—Rectilinear motion. Resisted rectilinear motion. Motion in two dimensions. Tangential and normal acceleration. Radial and transverse accelerations. Projectile. Resisted projectile. Simple harmonic motion. Forced and damped oscillations. Impulse and momentum. Work and energy. Motion in a vertical curve. Centrifugal forces. Conical pendulum. Cant on railway curves. Engineering applications.

Dynamics of Rigid Bodies:—D'Alembert's principle. Two-dimensional motion of a rigid body. Motion about a fixed axis. Compound pendulum. Principle of energy. Impulse and momentum in plane motion. Hoop stress and stress in the rim of a fly-wheel. Engineering applications.

Hydrostatics:—Fluid pressure. Resultant pressure, Centre of pressure. Equilibrium of floating bodies. Metacentre. Stability of floating bodies. Measurement of heights by Barometric pressure. Nature and action of simple hydraulic machines. Engineering applications.

Detailed syllabuses of studies in the subjects for the different branches of B.E. Part II Examination may be modified from time to time by the Syndicate on the recommendation of the Board of Studies in Engineering.

## TRANSITORY REGULATIONS

1. In this chapter, the phrase " New Regulations " shall be taken to mean the present body of regulations.

The phrases " Old Regulations " and " Old Rules " shall be taken to refer to the Regulations and Rules in operation on the date previous to that on which the New Regulations come into force.

2. (a) Candidates who have studied or are studying the Intermediate Engineering course according to the old regulations may be permitted to appear at the Intermediate Engineering Section A Examination which shall be held for them only in 1947 and at the Intermediate Engineering Section B Examination which shall be held for them only in 1947 and 1948 according to the Old Regulations.

(b) Similarly candidates who have studied or are studying Bachelor of Engineering courses according to the old regulations may be permitted to appear at the B.E. Part I Examination which shall be held for them only in 1947 and at the B.E. Part II Examination which shall be held for them only in 1947 and 1948 according to the Old Regulations.

3. Candidates who have studied or are studying the Bachelor of Metallurgy course according to the old regulations may be permitted to appear at the B.Met. Section B Examination which shall be held for them only in 1947 and at the B.Met. Final Examination which shall be held for them only in 1947 and 1948 according to the Old Regulations.

4. Notwithstanding the provision in Regulations 2 and 3 above, the Syndicate may in exceptional cases permit any candidate to appear at I.E., B.E. or B.Met. Examinations even after the year 1948.

5. Any candidate passing the I.E. Examination according to the old regulations in any year up to and including 1948 will be allowed to study the B.E. Part II courses in Civil, Mechanical, Electrical or Metallurgical Engineering according to the New Regulations.

6. Candidates who have been studying B.E. courses under the New Regulations during the 1945-46 session will be permitted to appear at special examinations to be held in the year 1946-47 for their benefit only in any or all of the subjects mentioned in Regulation 3 of the B.E. Part I Examination and in Regulation 4 of the B.E. Part II Examination of the New Regulations.

## BACHELOR OF ENGINEERING EXAMINATION

### PART I

I certify that ..... duly passed the Bachelor of Engineering Examination Part I held in the month of ..... 19

Senate House.

The 19 . Controller of Examinations.

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## BACHELOR OF ENGINEERING EXAMINATION

### PART II

### DIPLOMA

This is to certify that ..... obtained the Degree of Bachelor of Engineering in this University at the Annual Examination in the year 19 , the special branch in which he was examined having been ..... and that he was placed in the ..... Class.

Senate House,

The 19 . Vice-Chancellor.

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THE

CALCUTTA REVIEW

DECEMBER, 1946

# OPIUM CONSUMPTION, 1858-1893

## II

DR. H. C. MOOKERJEE

*Vice-President, Constituent Assembly of India*

WHILE, in the absence of officially sponsored statistics regarding the amount of opium issued by the Opium Department of the East India Company for use inside India, which, as stated already, the present writer has been unable to secure in spite of his best efforts, remarks on the policy governing its internal consumption have necessarily to be couched in very general terms, we are on much safer ground when we have to deal with the matter after India came under the Crown.

It took some time to pacify the country and to restore normal conditions. The poppy-growing areas in Bihar and in the North-West Provinces had seen much fighting, many of the peasants had left their villages, returning only when confidence had been restored. This explains why the opium agencies in these provinces began functioning something like normally about two years after the suppression of the Mutiny and, even then, some time had to elapse before the production of opium reached pre-Mutiny quantities.

That the estimate—for it was nothing else—that the largest quantity of opium consumed internally had never exceeded 1,000 chests during the days of the East India Company, was absolutely incorrect and that the needs of Indian addicts were mainly supplied from illicit sources, were clearly proved as soon as India came under the Crown and when, with production approaching normal quantities, more stringent supervision

was exercised on the manufacture and distribution of the narcotic. The amount of licit opium consumed internally as shown below was quadrupled in almost no time.

The first official mention in regard to the above matter will be found in the fifth paragraph of Despatch No. 312 of 1881, dated the 19th December, 1881, addressed by the Government of India, Department of Finance and Commerce, to Lord Hartington, Secretary of State for India, stating that in the previous twenty years (1860-1880)—

"In addition to the quantity exported, about 4,000 chests of Bengal opium (were) consumed in India."

This, of course, gives the average internal consumption for the twenty years 1860-1880 and, as such, is of no assistance in any enquiry regarding the increase in it from year to year. That there was a gradual increase is proved from information supplied towards the end of 1891, by the Secretary of State for India, a matter referred to below.

The present writer has failed to secure any information concerning the quantities used inside British India for the period 1881-1889, but in Revenue Despatch No. 94, dated the 17th December, 1891, from Lord Cross, Secertary of State of India, to the India Government we are told that—

"The quantity of licit opium consumed in British India, though it has fluctuated, has not increased greatly during the last 10 years."

In proof, the following figures were cited. Consumption inside India : 6,639 chests with an additional 225 chests for Berar total 6,864 chests in 1880; 6,752 chests with an additional 312 chests for Berar total 7,064 chests in 1890.

Information regarding the amount of opium issued for consumption in India excluding Burma in 1892-93, is to be found on page 156 of the first part of the *Final Report of the Royal Commission on Indian Opium* where it is said to have been 8,33,031 pounds. In paragraph No. 237 of the same report, it is stated that the average amount of opium issued for consumption in Burma during the five years 1886-91, was 51,725 seers or 1,06,036 pounds on the basis of 82 pounds per maund. In the absence of official information in regard to the quantity of opium consumed in Burma during 1892-93, it may, for purposes of this calculation, be safely assumed that about the same amount was consumed in Burma in that year. From this it follows that the total quantity consumed in India and Burma taken together, in 1892-93, was 9,39,067 pounds which is roughly 7,636 chests.

*Indo-British Condemnation of Increased Consumption*

The gradual increase in both the export trade, a matter dealt with elsewhere, as well as in the internal consumption, was regarded with such disfavour that, by the end of 1892, the organised churches in Great Britain petitioned the Parliament more than once to instruct its agents in India to take steps to suppress the traffic. A member of the House of Commons, in his evidence before the Royal Commission on Opium, stated :

" We have had them (petitions) from the two convocations of York and Canterbury, Wesleyans in Conference assembled, the Free Church Methodists, the Baptists, the Congregationalists, the Presbyterians of England, the Scotch Church, the Free Kirk (of Scotland), the Friends, the Unitarians....

" In addition to this, we had a petition to Parliament signed by the late Cardinal Manning and all the Roman Catholic bishops ; and one from the clergy of London ; and there was a memorial sent to Mr. Gladstone a year or two ago from two archbishops, twelve bishops, the archbishop of Dublin and thirty mayors and provosts."

As regards protests coming from laymen, it was said :

" In 1891, there were 957 petitions officially signed ; 3,353 petitions with 1,92,000 (non-official) signatures. This year (1892) there have been 331 petitions officially signed ; 2,563 petitions signed by 2,13,792 (non-official) people. Some of these petitions were from towns that seemed to take a very special interest in the subject."

During the days of the East India Company, missionaries did not enjoy much freedom in giving expression to their views in regard to matters pertaining to its administration. They were small in number and hence their knowledge of any problem was rarely of an All-India character. Things, however, had changed and they awoke to the evils implied in the increased internal consumption of the drug. It also seems probable that they felt that they had greater chances of success when their appeal was addressed to Parliament which, unlike the Company, was not financially interested in the opium traffic and was therefore likely to give it sympathetic consideration. The same witness, an anti-opiumist, in describing their attitude, said that 1,073 Indian missionaries, that is, non-Indians directly or indirectly engaged in Christian propaganda in India, had signed and forwarded to the House of Commons the following protest:

" We are unalterably opposed to the participation by the Government in the demoralising traffic in opium, and we record our conviction that it is a sin against God and a wrong to humanity."

Nor were these men of God and good friends of India content with merely pointing out their duty fearlessly to those among their countrymen who were responsible for the good government of India, thereby occasionally inviting unfriendliness, if not, at least occasionally, something worse, from British officials responsible for the state of things to which they had taken serious objection. Some of them, specially those holding high positions in the church and themselves servants of the Crown like the people whose handling of the opium problem they were condemning, supplied much-needed leadership which, in those days, had not been developed sufficiently by Indians. For instance, on the 10th April, 1891, the Anglican Bishop of Bombay presided at a public meeting attended largely by Indians condemning the opium traffic, at the end of which he sent a cable worded as follows :

"Public meeting at Bombay today. Resolved, opium traffic of Indian Government morally indefensible.—Bishop of Bombay, Chairman."

### *A Case of the Blind Leading the Blind*

These protests emanating from the clergy in Britain and India, to which the then feeble voice of politically helpless India was added, failed in moving the British Government which, operating from thousands of miles away, preferred to be guided by the advice of the men on the spot—practical men possessing intimate knowledge of India's administrative problems. That not even the most distinguished among them was infallible and did not always possess the knowledge, with the monopoly of which their principals credited them, is clear from the evidence offered before the Royal Commission on Opium by one of them who had been in our country for 38 years, in the course of which he had, according to his own statement, "filled pretty well every post that a member of the Civil Service could fill, from the most subordinate posts to those of a district officer, and commissioner, and chief commissioner of Oudh, and Leiutenant-Governor of the North-West Province," who was again "twice Member of Council," "altogether nine years a member of the Government of India," and who, after retirement, had been for eight years a member of the Council of India of the Secretary of State for India. This eminent retired official, Sir John Strachey, whose *India* was regarded as one of the authoritative books on our motherland and, as such, had been revised, enlarged and published in at least half a dozen editions at the time when he presented himself before the Royal Commission on Opium on the 15th September, 1893, stated that—

" We are told that the consumption of opium (in India) has been rapidly increasing, and that it has been fostered by our Government. These statements are absolutely baseless. . . . without attempting to go back to times of which we know comparatively little, this at least is certain, that, although the population goes on rapidly increasing, the consumption of opium, instead of increasing, has diminished.

" It is certainly smaller now than it was, for instance, ten years ago. This has been the result of the policy of the Government of India."

In view of what has appeared previously, the only possible explanation of the views expressed above appears to be that Sir John Strachey had become so convinced about the success achieved by the system inherited from the East India Company and improved by him and his colleagues, that, without caring to ascertain facts as revealed in official papers, he had come to the conclusion that it had led to a reduction in the internal consumption of the narcotic.

## *Opium Policy*, 1858-1893

The increase in the amount of opium consumed internally from 4,000 chests, the average for 1860-80, to 6,874 chests in 1880, 7,064 chests in 1890, and 7,636 chests in 1892-93, had not failed to attract the attention of the Society for the Suppression of the Opium Trade. In November, 1892, this organisation presented a memorial to Lord Kimberley, Secretary of State for India, praying among other things that instructions should be issued to the India Government to produce opium just sufficient for India's medical and scientific needs and that, in view of the large numbers of petitions and memorials addressed by Indian organisations condemning the gradual increase in the internal production, steps should be taken to ensure that the narcotic should be supplied to the public on the prescriptions of qualified physicians and for the treatment of diseases only.

The reply of Lord Kimberley was that the " strong views " of the Society " were not shared by a very large number of persons " and that—

" While the tendency of the policy of the Government of India was towards restriction, they were not prepared to go as far in that direction as the Society no doubt desired."

Naturally, in view of the undeniable proof of the increase in the internal consumption of the narcotic, the Secretary of State for India had to describe the opium policy of the British administration as a " tendency," and nothing more.

Another reason urged for adherence to the policy was that the revenue from this source could not be spared.

What the opium policy of this period amounted to was a refusal to interfere with the internal consumption of the drug even when it was gradually on the increase. When cornered, the British administration had the ready explanation that growth of population accounted for larger consumption.

That Indian public opinion had no voice in influencing in any way the opium policy of the British administration during this period becomes clear when we remember that legislation was entirely in the hands of British officials down to the Indian Councils Act of 1861, under which there was an augmentation in the number of what was called "additional" members, some of whom were nominated Indians. But, as has been rightly said,

"The legislative power of the Governor-General in Council was unimpaired and extended for all purposes over the whole of the Indian territories under the British Crown."

Politically speaking, the second forward step taken during this period was the Indian Councils Act of 1892, which provided for a limited and indirect use of the method of election for filling up some of the non-official seats in the legislatures. Lord Dufferin, whose suggestions, in a modified form, led to the above Act, made the principles underlying it clear when he said :

"It might be concluded that we were contemplating an approach, at all events, as far as the provinces are concerned, to English parliamentary government and an English constitutional system. Such a conclusion would be very wide of the mark ; and it would be wrong to leave either the India Office or the Indian public under so erroneous an impression.

"The executive that represents her (England's) imperium in India is an executive directly responsible not to any local authority, but to the Sovereign and to the British Parliament. Nor could its members divest themselves of this responsibility as long as Great Britain remains the paramount administrative power in India."

### *Royal Commission on Opium and After*

One of the terms of reference of the Royal Commission on Opium appointed early in 1893, under circumstances mentioned elsewhere, was "whether the growth of the poppy and the manufacture and sale of opium in British India (including Burma) should be prohibited except for medical purposes, etc."

It was held in the *Majority Report* that " the evil effects ascribed to the drug have been much exaggerated," that " opium is harmful, harmless or even beneficial, according to the measure and discretion with which it is used," and, lastly, that " the obstacles, administrative, financial and political, to a system of prohibition, " appeared to the signatories to be " insurmountable." As the arrangements for retail vend were regarded as, on the whole, " sufficiently restrictive," the Commissioners recommended the continuance of the system then in force.

It has been held, apparently on good grounds, that one of the principal factors in determining the views expressed in the *Majority Report of the Royal Commission on Opium* was the attitude of influential persons like Sir John Strachey, some of whom had retired from India and others were still engaged in administering its affairs.

As the existing policy, was supported by the British Government which accepted the *Majority Report*, the British administration in India saw no reason for taking any drastic steps to curtail the internal consumption. It continued to adhere to its old policy with the result that there was no reduction in the internal consumption of the drug.

### *Opium Consumption and Opium Policy*, 1909-1914

Before dealing with the internal consumption of opium during the above period, it is necessary to state that at this time Great Britain thought it expedient, for reasons which need not be referred to here, to grant India a small instalment of political power. Under the Morley-Minto Reforms of 1909, the Provincial and Central legislatures were enlarged and reconstructed, the method adopted for filling up the non-official seats being partly direct and partly indirect. But the distribution of seats in the Indian (Central) Legislative Council was such as always to have an official majority in which connection we have to remember that opium monopoly was a central subject and that revenue from the China trade in the narcotic was in the process of gradual diminution, with ultimate prospects of its total extinction.

The reason for the conditions under which Indians were accorded representation in the newly constituted Central legisltaure, in the words of Lord Morley, was that the Governor-General's Council, " in its legislative, as well as its executive character, should continue to be so constituted as to ensure its constant and uninterrupted power to fulfil the constitutional obligations that it owes, and must always owe, to His Majesty's Government and to the Imperial Parliament."

In actual practice, what happened was that, though the non-official members were given the right of moving resolutions and asking supplementary questions, " the argument of numbers," in the language of the *Simon Commission Report* (Vol. I, paragraph 136), " remained with the Central Government."

This retention of power by the Central Government, with revenue as its first pre-occupation, accounts for the maintenance of the old policy. This tendency was strengthened by the agreement with China referred to elsewhere, which had the effect, of course, indirectly, of increasing the importance of the revenue derived from opium consumed inside India. A reduction in the internal consumption of opium, which, under the new circumstances, would mean a reduction in the excise revenue derived from it, would have embarrassed it still further.

The following statement shows the number of chests issued for internal consumption from 1909 to 1911, the two years following the introduction of the Morley-Minto Reforms :

| Year | Number of Chests |
|---|---|
| 1909-10 .. | 7,236 |
| 1910-11 .. | 7,794 |

There was an outcry at the end of 1911 in regard to the increase in the internal consumption of the drug. Attention was drawn to the fact that the British administration had entered into a fresh arrangement with China, under which it had agreed to stop all opium exports to it by 1917, and it was argued that if the drug was bad for China, it was equally bad for India.

The reply to this criticism came in a Despatch of the Government of Lord Hardinge (1911) in which it was observed that—

" The opium habit as a vice scarcely exists in India, opium is extensively used for non-medical and quasi-medical purposes, in some cases with benefit and for the most part without injurious consequences, the non-medical uses are so interwoven with the medical uses that it would not be practicable to draw a distinction between them in the distribution and sale of the drug and it is not necessary that the growth of the poppy and the manufacture and sale of opium in British India should be prohibited except for medical purposes."

In justification of the opium policy, Lord Hardinge drew the attention of the India Office to the gradual increases in the retail price of the drug, suggesting that, as in the case of alcoholic beverages in England, this would discourage consumption. Whatever the reasons, he was supported

by the Secretary of State for India, the final authority in Indian matters ; the old policy was continued and, with it, the tendency towards increased consumption persisted.

The incorrectness of the opinion that higher retail prices necessarily reduce consumption is more than proved when we examine the figures appearing below :

| Year | Number of Chests |
|---|---|
| 1911-12 .. | 8,291 |
| 1912-13 .. | 9,595 |
| 1913-14 ... | 9,867 |

From what has appeared above, it follows that, during this period, the old policy of permitting an increase in internal consumption was followed on the pleas of the small extent of addiction, its non-injurious effects in a majority of cases and the practical difficulties standing in the way of any effort towards making the drug available exclusively for medical purposes.

In reply, anti-opiumists said that in the absence of any statistical information regarding the number of addicts, the British administration had no right to claim that addiction was confined to small numbers, secondly, that there was no expert evidence proving the harmlessness of opium addiction in most cases, thirdly, that where the welfare of the ruled, whether large or small in number, was concerned, it was its duty, if it called itself a government aiming at their benefit, to devise satisfactory ways and means to end the non-medical use of the drug and, lastly, that its professed inability to do so was the clearest possible evidence of its inefficiency.

### *Opium Consumption and Opium Policy*, 1914-1920

The First World War started some time after the beginning of the official year 1914-15, and it did not affect India to any large extent immediately. This, so far as the drug is concerned, is reflected in the amount of opium consumed internally. As the war assumed a gradually intenser form, and, with it, more and more extensive demands were made on India's material resources and man power, the British administration in India had to concentrate all its energies to meet them. Most members of the higher staff were engaged in war service and there was a general slackening of supervision so far as the internal administration of the country was concerned.

The recruitment of very large numbers of people from practically every part of India, some of whom at least, as proved by the present writer elsewhere, were not characterised by their respect for either the civil or the criminal law of the land, the congestion in railways and steamers, the constant going to and fro of people in abnormally large numbers greatly facilitated smuggling. The seizures of illicit opium at this time, abnormally large as they were both in number as well as in the quantities involved, constitute no indication of the wide prevalence of the contraband traffic. The preventive staff was depleted and, if the truth may be disclosed, it only too often found itself helpless where the smuggling was done by ruffians who, for the time being, had put on the King's uniform. This illicit opium was consumed not only by some of the smugglers themselves but was also, if such reports as the present writer received at that time from his friends interested in " temperance " work in different parts of India are correct, supplied to many of the less scrupulous licensed vendors.

The increased consumption of stimulants in the West during the First and Second World Wars and that in spite of very high prices and, occasionally, limited availability, justifies the view that, at least during this period, higher earnings, coupled with a strong inclination among the addicts to either enjoy themselves or to meet the strain due to war conditions with the assistance of the drug, must have stimulated its consumption.

In view of what has been stated above, it seems not quite incorrect to assume that a large proportion of the extra opium required by people of the above category came from illicit sources.

The result of the appearance of large quantities of contraband opium on the market was a reduction in the consumption of licit opium during the war years 1914-1917. The efforts put forth after this time to control the situation discouraged the activities of smugglers but not the demand for the narcotic among the addicts who had not, up to that time, suffered from economic difficulties, and the year 1917-18 saw an increase in the internal consumption of licit opium.

The general correctness of the above observations is borne out by the following figures :

| Year | | Number of Chests |
|---|---|---|
| 1914-15 | .. | 9,704 |
| 1915-16 | .. | 8,907 |
| 1916-17 | .. | 8,799 |
| 1917-18 | .. | 9,118 |

With the restoration of something like pre-war conditions and a decrease of earnings due to a marked falling off in the Western demand for Indian goods without a coresponding reduction in the prices of practically all commodities which had showed a very steep rise during the war period, there appeared a tendency to revert to the consumption of opium in what may be regarded as normal amounts. This seems proved by the following figures :

| Year | | Number of Chests |
|---|---|---|
| 1918-19 | .. | 8,630 |
| 1919-20 | .. | 8,653 |

As regards the opium policy during the period under review here, it may be said, without any fear of contradiction, that the temporary reduction in internal consumption was not due to any change in it. This is clear from what follows.

Under the peace treaties of 1919-20, concluded after the First World War, the nations concerned had agreed to the ratification of the Hague Opium Convention. The first of its six chapters defines raw opium and contains pledges on the part of the signatory Powers for the control of the production and distribution of raw opium. Though the Hague Convention, by reason of the circumstances under which it came into existence, laid the principal emphasis on measures calculated to discourage the consumption of prepared, that is, smoking opium, the first article, when examined closely, makes it clear that it contemplated at some time, however distant, what has been called " the governance of the domestic traffic " of raw opium—a matter in which the India Government was interested in so far as the internal consumption of the narcotic was concerned.

Feeling that the Parliament, on which lay the ultimate responsibility for the administration of India, should know the reasons for its opium policy, the Director, Central Bureau of Information, Government of India, in the report prepared for presentation to it entitled *India in* 1910-21, observed :

" The consumption of opium and hemp derivatives excites little reprobation in India, provided that the use of these drugs is not carried to immoderate lengths. Indeed, the whole position of opium in particular is so different in India and in Western countries that a word of explanation is required.

"The broad facts of the opium question are in outline these. The soil of most parts of India will produce the opium poppy. The population of India had habituated itself for many centuries before the arrival of the British to the consumption of opium in small quantities. The vast majority of the people connect this drug, and undoubtedly to some extent justifiably, with certain medical properties. They have used it for many years on ceremonial occasions; they cannot and will not be broken of the habit suddenly."

*(To be continued)*

# SCIENTIFIC HUMANISM*

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YOU will pardon me for beginning the talk with a question and that too not a pleasant one. Suppose you had a tummy-ache and I came along and proposed to you that, instead of your staying at home and letting the doctor examine and treat you, I would remove you to Lindsay Street outside the Hogg Market, put you in a bed and make every passer-by inquire about your health and give you advice. How do you think you would like the idea? Absurd, more than absurd, preposterous, you would say. In fact you would begin to doubt my sanity. But this is exactly how the Babylonians treated their patients. Thanks Heavens we have outgrown this practice. However strange as it may seem, that is how we treat community-illnesses to-day. In his beautiful poem called *Mariz-i-har-dil-aziz* (the over-popular beloved patient), my friend, Sir Shanti Swaroop Bhatnagar has ably depicted the unenviable plight in which India, with her many troubles, finds herself today. It is made still worse by the so-called experts, each viewing the situation in his own limited field and enthusiastically advocating the exclusive use of his special nostrum. This almost amounts to the senseless insistence of an ear specialist to take out the wax when the patient is suffering from acute tooth-ache or to the irritating pleadings of the firl in a departmental store, to sell you a bonnet when you are urgently in need of a pair of spectacles. In the planning of community welfare the would-be beneficiary has little or no say, very often it is motivated almost wholly by the so-called experience, temperament and perhaps fads of the planner. There is little contact with realities, and no true perspective. So, little headway is made. 'Success' or 'failure' of a scheme is often a matter of how loud the administration beats his drums. The whole thing collapses soon after he leaves the scene. The new-comer repeats the same old process and so it goes on.

How, then, should the community problems be attacked? The answer may be found in the Declaration of Scientific Principles by the British Association for Advancement of Science made in a conference held under the presidency of Sir Richard Gregory, soon after the announcement of

* A talk at the Rotary Club, Calcutta, 19th February, 1946.

the Atlantic Charter. This was strongly supported by the Ambassadors for the United States of America, China and U.S.S.R., as also by Mr. H. G. Wells and other leading lights of the United Kingdom. The Second Principle states that, " communities depend for their *existence*, their *survival* and *advancement* on knowledge of themselves and of the properties of things in the world around them." These are extremely weighty words solemnly pronounced by a worthy society of some of the world's most eminent and responsible scientists at a most crucial moment in the world's history. How is this knowledge to be gained ? For this we must turn to the scientific method as the Webbs did. It provides the necessary re-agents in the form of laws and techniques which can resolve the most difficult problems of life. The charts displayed here are intended to illustrate how the scientific method has been applied to the study of community problems at the Singur Health Centre.

We may or may not agree with Jules Romains in his " Unanimism of Life " or his ' deification of society,' but we cannot ignore the fact that man faced as he is with two major tasks, namely, (1) to establish his relationship with his physical environment and (2) to establish relationship with his fellow creatures, necessarily finds himself coalesced into a community, to which he contributes his individual inheritance, his achievements and his environment. The community thus acquires the characteristics of an organism. As such, the diagnosis of community ills should precede the application of appropriate treatment, just as it does in a clinical case. This means we should start with the preparation of a case-history.

The essential points of the case-history for the Singur Health Centre are depicted in these charts ; further details will be found in this Report which, I hope, will be published very soon. Within the short time at my disposal, I can only touch upon a few points by way of illustration. The Centre comprises 33 square miles and includes 4 Unions. It lies about 22 miles north-west of Calcutta between the Damodar and the Hooghly. The total population is about 63,000 distributed in 11,700 families. For purposes of investigation a statistically adequate sample was drawn. How this population resembles Bengal and differs from Japan and England and Wales in the matter of age and sex distribution and civil state may be seen from the respective pyramids in Chart 3. This has important sociological bearings into which we cannot enter at present. The map shows how the river, road and railway embankments prevent the drainage of the countryside and provide a complicated problem specially in relation to malaria.

I have no time to go into the details of the method of investigation. It will suffice to say that each individual and each family was investigated.

Systematic inspection of the houses and their surroundings was carried out. It was found that there were half as many *dobas* as the number of houses. The most remarkable fact that emerged from housing survey was a state of extraordinary overcrowding which one does not usually associate with rural life. About 65% of the population was provided with less than 36 square feet of floor space. Very few people had more than 50 square feet, which is the minimum standard adopted for rural areas under the Bombay Plan. Lack of latrine accommodation together with the no-shoe habit exposes the population to hookworm infection. Actually over 45 per cent of the population was found infected. Birth and death rates compared favourably with Bengal, but not so with England and Wales. Malaria, dysentery, diarrhoea, cholera, pneumonia and typhoid fevers constituted the principal causes of death. Infant mortality rate was 196. Even with a birth rate of 43 the growth of population was only moderate; for every woman that died in the reproductive period of life only 1.3 took her place.

The active population makes an interesting study, while in India as a whole 44 per cent of the population contributes towards family income, in Bengal only 29 and in Singur 31 per cent do so. These differences are due to women, of whom in the country as a whole 28 per cent are active as against 8 per cent and 3 per cent in Bengal and Singur respectively.

The tardy growth and development of Singur children is illustrated in Chart 11. It will suffice here to state that at the end of the first year of life the Singur infant is already one year behind his American brother in weight and half a year in height. By the time he is 12 years old, there is a difference of 3 years in weight and of $2\frac{1}{2}$ years in height.

The shaded parts of the pyramids in Chart 12 show the extent of various nutritional deficiencies. Contrary to expectations, the economic superiority of the family gives no advantage, except as regards general nutrition. In fact it is the other way round. This illustrates how *a priori* assumptions may sometimes prove misleading.

Medical relief is unsatisfactory and quacks flourish. There is only one qualified doctor for every 5,000 people whereas, in U.S.A. there is one for 750.

43 per cent of the males and only 5 per cent of the females over 10 years are literate, but only 32 per cent of the male and 5 per cent of the female children of school-going age attend school. The worst feature is that only one out of every five children who join school reaches Class IV.

Even though 80 per cent of the land is cultivated against 60 per cent in Bengal, agriculture engages less than half the male population. The rest must find other occupations.

Joint family system is slowly disintegrating under the stress of modern civilisation.

Outlook on food is mainly determined by tradition. As regards causes of disease 27 per cent of the families still believe in demons and 34 per cent blame God. They are almost evenly divided in their beliefs regarding the prevention and cure of diseases as between rationalists, religious and fatalists. Community sense is poorly developed.

Only 10 per cent of children under 2 receive more than 10 ounces of milk.

One should have thought that in a rice-eating community the food would contain excess of carbohydrates and enough of calories. This is not so, as 29 per cent. of the families are deficient in calories and 20 per cent. in carbohydrates. The most serious deficiency is in fat consumption, 67 per cent. of the families being deficient. Deficiency in calcium is another serious problem.

The annual expenditure *per capita* was only Rs. 165 at a time when the index number of wholesale prices varied between 236 and 240; reduced to the pre-war value it amounted to Rs. 68.8. Rs. 148 were spent on food; Re. 1 on education and as much as Rs. 2½ on medical relief.

Average age of girls at marriage is 12 years and age at first pregnancy 16 years. A case can be made out for raising the marriageable age under Sarda Act by 1 year. Voluntary reform in this direction is very tardy because age at marriage has advanced only by 1½ years in the course of two generations. 29 per cent. of the married women are widows. The total reproduction loss due to widowhood amounts to 15 per cent. It is a curious fact that with a high primary vaccination rate the incidence of small-pox in this area should be quite high.

12 per cent. of the population or more is unwell at any time. Of this 1 per cent ill and over 2 per cent. chronically ill. These illnesses are twice as frequent amongst the males as amongst the females. Nearly 40 per cent of the population has had one or more sickness, sufficiently serious to be remembered, during the preceding 12 months. Duration of sickness presents an interesting study. There is an annual loss of 21 days per head of population as compared to 9 days in America. For every death that occurs as many as 800 man-days are lost, for the adults the loss amounts to 872 man-days or to put it differently, for each adult death one person is put out of commission for 2 years, 4 months and 22 days, during which period instead of being an asset he is a liability to the community for maintenance, nursing and treatment. How many people realise the significance of mortality statistics? At the lowest computation this small area loses Rs. 40,00,000 annually through sickness.

Significance of malaria may be realised when it is seen that one adult person would lose 7 years 9 months and 22 days for every death from this diasese.

In the matter of sickness, education as received in the villages, gives no advantage over the illiterates, but relative economic prosperity seems to be asociated with better health.

I have mentioned a few salient features of the community under consideration, mainly from health point of view. These studies could be extended to other fields, but the question remains whether we can make a community diagnosis on somewhat similar lines as the clinical diagnosis. Yes, I think, we can ; provided we remember that the standards for comparison in this case would be *local* and *changeable* unlike the anatomical and physiological standards which are universal and fixed.

Such then is the knowledge on which, as the British scientists emphasize, depends the existence, survival and advancement of communities. Knowing, as we should do, the magnitude of sickness and disabilities together with the causal factors as also the extent of economic loss suffered by the community, we should be in a position to see how best, in the limited field of public health, the pain, the sufferings and the destitution can be prevented or reduced and at what cost ? However, the best results can be achieved only when we recognise that *welfare is indivisible.* There must be an integrated survey from the various aspects of community life and there must be an integrated plan and programme with varying emphasis depending upon the crystallised needs, with priorities for the given place and time, the main approach and the ultimate objective being *positive* health, wealth, culture and happiness.

Keeping these principles in mind I have ventured to suggest a scheme of National Welfare. It is presented in the form of the Tree of Scientific Humanism. The roots are science, planning, partiotism and organisation, the trunk represents Government whose functions are Research, Education, Service facilities, Technical supervision, Administration and National Planning. This last is only a framework on integrated surveys and on the consolidated data received from the peripheral groups through the Polytechnical Councils placed at District, subdivisions and Union levels, which fully take into consideration local needs according to priorities and the available human and material resources as well as the environment. The appropriate details in the National Plan and Programme are filled in at these different levels and the work is executed by the respective institutions. The key position in this scheme is held by the village Polytechnical Friends—a man and a woman, who because of their personality, patriotism, local knowledge and technical training should, on the one

hand, inspire, stimulate, canalise, crystallise, interpret and voice the local needs and natural aspirations of their wards to the Union Polytechnical Council and on the other hand organise and assist the villagers in the execution of the village programmes as developed and completed by the Council, within the frame work of the sub-divisional, district and National Plans. These men and women should receive adequate remunerations.

Last week His Excellency the Governor promised gigantic development schemes for the Province of Bengal, I suggest that the scheme presented here should be developed in connection with these plans so that we may get the most for our efforts and for our money.

Scientific Humanism, I venture to say, will give us what the devotee got out of the goddess. He had to satisfy the father's desire for wealth, the mother's prayers for light in her blind eyes and the wife's yearnings for an heir. The goddess had granted but one gift. The devotee's prayer to the goddess was that his mother may see his son drinking milk out of a cup of gold.

# FOOD PLANNING FOR BENGAL : I

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## I. INTRODUCTION

THE word 'planning' has definitely come to stay. The necessity of a planned drive especially for increasing the material prosperity of a people is to-day universally recognised. As a matter of fact, every country to-day is busy with carrying out various plans of economic development. And we too, in this country, have been up with quite a lot of plans. Already some works have been undertaken. But the defect most of these suffer from, is the lack of comprehensiveness. It will be our endeavour to deal here with the various problems of food-planning for the province of Bengal. And in doing so we have tried to make as comprehensive a study as it is possible within such a short compass.

Planning of food should form No. I item in any scheme of economic development of the people. If this is true in general, it is truer in the cases of Bengal. For the majority of the people in Bengal go normally under-fed and under-nourished. In fact, India as a whole suffers from a chronic food shortage. It is not possible to measure the precise extent of this shortage. But it has been etsimated to be something between 55 and 60 million tons per day in India. Of all the provinces of India, however, Bengal, as the investigations carried out by Sir John Megaw in 1933 showed, is the worst sufferer. While taking the average of the British administered India, 39 per cent. of the people were found to be well-nourished, 41 per cent. poorly so and 20 per cent. " very badly nourished," in Bengal only 22 per cent. did have the fortune of being well-nourished, 47 per cent. poorly nourished and 31 per cent. "very badly nourished." [1] Thus, nearly 80 per cent. of the people in Bengal are undernourished even in normal times.

But the problem is not merely that the vast majority of the people of Bengal are normally under-fed and under-nourished owing mainly to their inability to procure full meals every day, but the dietary of the majo-

1 Sir John Megaw : ' An Enquiry into Certain Public Health Aspect of Village Life in India ' (1933), p. 10 ; quoted in Nanavati and Anjaria, ' The Indian Rural Problem,' 1944, p. 56.

rity is highly defective as it is generally deficient in one or more of the essential constituents required for body-building and for keeping the body ordinarily immune from infections. An eminent physician of Bengal has stated : " Our present Indian diet is defective and ill-balanced and is directly responsible for progressive deterioration of the physical health of the people, particularly of Bengal, and indirectly affecting their moral and economic well-being."[2] Writing nearly four decades back, Lt. Col. D. McCay of the Indian Medical Service had observed : " The level of physical efficiency of Indian worker is, above all else, a matter of food. No other single factor, race, climate, etc., has so profound an influence on their capacity to sustain arduous labour and prolonged muscular exertion. Nowhere in this world is this outstanding influence of food more conspicuously illustrated than in India. As we pass from the north-west regions of the Punjab down to the Gangetic plain up to the coast of Bengal, there is a gradual fall in the stature, weight, stamina and efficiency of the people. In accordance with this decline in manly characteristics, it is of utmost significance that there is an accompanying gradual fall in nutritive value of the dietaries, and more especially in the average level of protein metabolism attained by the people of the Punjab, United Provinces, Bihar and Bengal." The findings of McCay have found support in another great authority on nutritional problems, Sir Robert McCarrison, a former Director of Nutritional Research at Pasteur Institute, Coonoor, South India. As a result of experiments made by him on the dietaries of different peoples of India, he has come to the conclusion that the diet of the Bengalees happen to be very poor—poorer than those of other Indian peoples excepting the Madrassis. It has been said of Bengal that 95 per cent. of her people live on a dietary on which even the rats could hardly live for more than five weeks. The result of this deficiency in diet has been most disastrous for the people of Bengal. " Consistent adherence to a deficient, ill-balanced dietary (especially in the growing period of one's life) is the most potent cause of poor physical development, general ill-health, lack of stamina and short life, and the ravages of infectious diseases are especially severe amongst those whose resistance has been impaired by defective nutrition." Under- and mal-nutrition of the people in general are responsible for the heavy annual toll of life exacted by all forms of virulent diseases that have now made their secure homes in this country, particularly in Bengal. Besides the enormous loss in human life, a vast human power is annually crippled and maimed, and become incapacitated causing heavy material as well as moral loss to the community. " Unbalanced diet, faulty nutrition ,and insanitary conditions

[2] Chunilal Bose, 'Food' (Cal. Univ.), 1933, pp. 2-3.

of life are the root cause of many diseases, such as, intestinal and kidney troubles, malnutritional oedema, epidemic-dropsy, scurvy, rickets, stone in the bladder, beri-beri, blood-poisoning, eczema, night blindedness, pellegra, osteomalacia, tetany, dental caries, disorder of pregnancy, obesity, gout, tuberculosis, nervousness, and above all lowering down of vitality, stunted growth, less resistance to diseases and shortening the span of life." It is high time, therefore, that a well devised scheme of dietary, keeping in view the essential calorie requirements, on the one hand, and the availability of the different food materials, on the other, were adopted to ensure the growth of a healthy people. Mere scheming, however, would not solve matters. Arrangements will have to be made to make the essential articles of food available to each and every man within the community. It means that a planned food-production and an increase in the purchasing power of the masses to provide the wherewithal for procuring the necessary articles of food are the two most important things to be achieved at the earliest opportunity. The aim and object of the plan must be " the furtherance of human well-being, the promotion of the welfare of the people and the improvement of their standard of living, including the raising of their level of nutrition."

## Optimum Nutritional Requirements

But to raise the level of nutrition it is necessary to ascertain the average nutritional requirement. A normal human body requires the following substances for its growth and development, *viz.*, proteins, carbo-hydrates, fats, mineral salts, water and vitamins. There are more or less definite proportions in which these are required, such proportions varying, however, with the age, sex, and occupation of the people. A healthy adult person must consume in a day of twenty-four hours food-materials to provide the different constituents in quantities noted below[3] :

| | | |
|---|---|---|
| Carbo-hydrates | .. | 32 ounces |
| Protein-food | .. | 6 ,, |
| Fats | .. | 4 ,, |
| Salts | .. | 1 ,, |
| Total | .. | 43 ounces |

The total amount of food consumed by an average man should provide a calorie value of about 2,400 to 3,000. This has been estimated on the basis of the average daily output of energy of a working adult person. The requirement in calories, however, varies with the age, sex, occupation

[3] Bose, *op. cit.*, p. 62.

and the bodyweight. The average requirements for different ages and sexes, as drawn up by a Committee of Health Organisation of the League of Nations in 1932, is as follows :—

CALORIE REQUIREMENTS FOR DIFFERENT AGES AND SEXES[4]

| Class | Coefficient* | Calories[5] |
|---|---|---|
| Adult man | 1.0 | 3,000 |
| Adult woman | 0.8 | 2,400 |
| Boys, 13 upwards | 1.0 | 3,000 |
| Girls, ,, | 0.8 | 2,400 |
| Child, 12 and 13 | 0.8 | 2,400 |
| ,, 10 and 11 | 0.7 | 2,100 |
| ,, 8 and 9 | 0.6 | 1,800 |
| ,, 6 and 7 | 0.5 | 1,500 |
| ,, 4 and 5 | 0.4 | 1,200 |
| ,, 2 and 3 | 0.3 | 900 |
| ,, 0 and 2 | 0.2 | 600 |

* (1-3,000 calories gross).

Persons engaged in hard work would require more than 3,000 calories a day.

The diet of an average working adult person should be so constituted as not only will supply in the aggregate the required calories of 3,000 but would at the same time provide the different constituent elements essential for the growth and development of the body. The standard dietary must aim at providing a total of 90 to 100 gms. of protein, 80 to 90 gms. of fat and 360-450 gms. of carbo-hydrate per man per day. The protein should be derived from both vegetable and animal sources. Besides, there should be the requisite quantities of vitamins and mineral salts contained in the diet, and enough cellulose for the movement of bowels. But estimates as regards the exact requirements of the different body-building materials, however, vary with the climate and other geographical conditions. Under Indian conditions, according to Dr. Radha Kamal Mukherjee, the standard dietary should consist of 85 gms. of protein 60 gms. of fat, and 605 gms. of carbo-hydrates, giving rise to a total of 3,000 calories.[6] The Bengal Jail diet, on the other hand, is calculated to provide an aggregate of 3,508 calories derived from 93.31 gms. of protein 30.49 gms. of fat, and 693.33 gms. of carbo-hydrates. Dr. B. C. Guha of the Calcutta University, now the chief adviser to the Government of India, has estimated that 2,780 calories are required per man per day in Bengal. The total requirement for Bengal and Southern India, according

4 Ray, Cheap Balanced Diet ' (Cal. Univ.), 1939, p. 41.
5 A calorie represents the amount of heat required to raise the temperature of 1 kilogram of water by 1 degree Centigrade.
6 Mukherjee, ' Food Planning for Four Hundred Millions,' 1938, p. 71.

to Mukherjee, is 2,400 calories. The average calorie requirement for this Province may, therefore, be taken at 2,500 to 2,800 per head per day.

### Optimum Daily Diet Requirements

Now, the dietary that would provide the necessaryn utritional requirements may be constituted of different food-sutffs, the nature of which would vary according to the tastes, habits and customs of a people as well as to the availability of the different articles of food. Sir P. M. Kharegat and Dr. Aykroyd, two of the members of the Indian Delegation to the United Nations Conference on Food and Agriculture held at Hot Springs in Virginia, U.S.A., in 1943, have estimated the following diet requirements for an average Indian adult :—

Messrs Kharegat and Aykryod's Estimate of a Balanced Diet in India

| Food-stuffs | Consumption unit (oz. per day per adult) | Calories |
|---|---|---|
| Cereals | 16 | |
| Pulses | 3 | |
| Sugar | 2 | |
| Fats and oils | 1.5 | |
| Whole milk | 8 | |
| Vegetables | 6 | |
| Fruits | 2 | |
| Butter or milk | | |
| or, | | |
| Meat, fish, eggs | 2 to 3 | |
| Total .. | 41 (approximately) | 2,600 |

While according to Dr. B. C. Guha, the optimum or nearly optimum daily diet that should be aimed at for an average adult of ordinary active habits should be as follows :—

Dr. Guha's Estimate of an Optimum Daily Diet (in ozs.)

| | |
|---|---|
| Unmilled or lightly milled rice .. .. | 10 |
| Whole wheat .. .. .. .. | 6 |
| Pulses .. .. .. .. | 4 |
| Eggs .. .. .. .. .. | 1 or 2 |
| Sugar .. .. .. .. .. | 2 |
| Milk and milk products .. .. .. | 10 |
| Fish and meat (or extra milk products for vegetarians) | 4 |
| Non-leafy vegetables .. .. .. | 5 |
| Green leafy vegetables .. .. .. | 5 |
| Fats and oils .. .. .. .. | 2 |
| Fruits .. .. .. .. .. | 3 |
| Total .. .. .. .. | 51 |

The above estimate will provide 96 gms. of proteins, 75 gms. of fats and 470 gms. of carbo-hydrates, and would yield 2,780 calories. Professor B. C. Guha is of opinion that the dietary chalked out by him or any other similar dietary may be made the over-all basis of a long term plan of food production for the entire population, considering that persons in heavy occupation will eat more and children will eat less. Making, therefore, Guha's estimate as the over-all basis, the food-stuffs required daily to ensure the optimum nutritional requirements for 60 million people of Bengal will be :—

OPTIMUM DAILY DIET REQUIREMENT OF BENGAL

| Food-stuffs | Thousand tons | |
|---|---|---|
| Unmilled or lightly milled rice | 16.74 | |
| Whole wheat | 10.04 | |
| Pulses | 6.70 | |
| Eggs | | 1 or 2 millions |
| Sugar | 3.35 | |
| Milk and milk products | 16.74 | |
| Fish and meat | 6.70 | |
| Non-leafy vegetables | 8.37 | |
| Green leafy vegetables | 8.37 | |
| Fats and oils | 3.35 | |
| Fruits | 5.02 | |

OPTIMUM ANNUAL FOOD REQUIREMENTS OF BENGAL

The optimum annual food requirement of Bengal would, therefore, be as follows :—

OPTIMUM ANNUAL FOOD REQUIREMENTS OF BENGAL

| Food-stuffs | Million tons | |
|---|---|---|
| Unmilled or lightly milled rice | 6.11 | |
| Whole wheat | 3.66 | |
| Pulses | 2.44 | |
| Eggs | | 60 or 120 millions |
| Sugar | 1.22 | |
| Milk and milk products | 6.11 | |
| Fish and meat | 2.44 | |
| Non-leafy vegetables | 3.05 | |
| Green leafy vegetables | 3.05 | |
| Fats and oils | 1.22 | |
| Fruits | 1.83 | |

PRESENT OUTPUT OF THE PRINCIPAL FOOD-STUFFS IN BENGAL

There are no precise statistics as to the actual output of the principal food-stuffs in Bengal. A very rough estimate, however, made from various sources, is given below :—

PRESENT OUTPUT OF THE PRINCIPAL FOOD-STUFFS IN BENGAL

| Food-stuffs | Yield (Million tons) |
|---|---|
| Rice .. .. .. | 8.20 |
| Wheat flour .. .. | 0.18 |
| Pulses including grams .. | 0.80 |
| Fish .. .. .. | 0.18 |
| Meat .. .. .. | 0.27 |
| Milk and milk products .. | 1.25 |
| Mustard oil .. .. | 0.15 |
| Raw sugar or Refined sugar .. | 0.21 |
| Vegetables .. .. | 1.64 |
| Potato .. .. .. | 0.27 |

ESTIMATED DEFICITS OF THE PRINCIPAL FOOD-STUFFS IN BENGAL

The estimated deficit of the principal food-stuffs in Bengal would, therefore, according to present available figures, stand as follows :—

ESTIMATED DEFICITS OF PRINCIPAL FOOD-STUFFS IN BENGAL

| Food-stuffs | Excess (+) or Deficits (—) in Million tons |
|---|---|
| Unmilled or lightly milled rice .. | +2.09 |
| Whole wheat .. .. .. | —3.48 |
| Pulses .. .. .. | —1.64 |
| Eggs .. .. .. | .. |
| Sugar .. .. .. .. | —1.01 |
| Milk and milk products .. .. | —4.86 |
| Fish and meat .. .. .. | —1.99 |
| Non-leafy and green leafy vegetables .. | —1.41 |
| Fruits .. .. .. .. | .. |

The actual excess, however, would be less and the deficits much greater when allowances will be made on accounts of (1) loss at the time of production, transit, storage, etc., (2) seed requirements, (3) storage for emergencies, (4) provision for increase of population during the next decade, (5) and other miscellaneous items.

The total deficit of food supply in Bengal may be computed in another way. It has been observed that the total calorie value of food required per head per day varies as between 2,400 and 3,000. Taking the average of 2,800 calories per man per day, the annual requirement for a man is about 10,22,000 calories. It may be noted that prior to World War No. 1, the per capita consumption of food in the United Kingdom was, as esti-

mated by Sir T. H. Middleton, about 10,92,000 calories per annum, while in the United States it was, according to Raymond Pearl's estimate, 13,05,000 calories or nearly 20 per cent. more than that of the United Kingdom. In Germany, the consumption was about the same rate as in the United Kingdom.[7] Considering that the average requirement in India would be less than that of the Western countries, the fixing of the annual per capita requirement at 10,22,000 in Bengal would be quite reasonable. Now, by using Lusk's co-efficients of comparison of the food requirements of children with those of an adult man or woman, "the average and total man value" of Bengal's population of 1941 may be computed as below.

The proportion of children and adults to the total population in India is as follows :—

| | |
|---|---|
| 0-15 years .. .. | 39.3 per cent. |
| 15-50 ,, .. .. | 50.5 ,, |
| 50 years and over .. .. | 9.6 ,, |
| | 100.0 per cent. |

Hence "the average and total man value" is :—

THE AVERAGE AND TOTAL MAN VALUE OF BENGAL'S POPULATION OF 1941

| Ages | Population in Millions (1941) | "Man Value" per Head | "Total" Man Value" in Millions |
|---|---|---|---|
| 0.15 .. | 24.06 | 0.7 | 16.83 |
| Males of 15 and up | 18.73 | 1.0 | 18.73 |
| Females of 15 and up | 17.51 | 0.83 | 14.53 |
| Total .. .. | 60.30 | 0.84 | 50.09 |

Therefore, the total calorie requirement for the population of Bengal of 1941 would amount to approximately

50.09 million × 10,22,000 = 51,191,980,000,000 calories

that is, roughly 51.2 billion calories per annum.

As for the total food-stuffs at present available for consumption, the aggregate food grains in the Province may at best be taken at about 10 million tons.[8] Estimated on the basis of 100 calories per ounce per average Indian food grains,[9] 10 millions tons would give rise to 35.85 billion calories. As noted before, the total supply of milk and milk products in Bengal is about 1.25 million tons, which would yield an approximate calorie value of 896 thousand millions or 0.9 billions.[10] There is at present no accurate

7 World Agriculture, p. 13.

8 The official production recorded in 1941-42 was 10,005,900 tons. *Cf.* Burns, 'Technological Possibilities of Agricultural Development,' p. 41.

9 Mukherjee, *op. cit.*, p. 24.

10 1 oz. of milk = 20 calories.

figure for the yield of fish in Bengal. According to Rai Bahadur Dr. S. L. Hora. Director of Fisheries, Bengal, the total quantity of fish available for consumption in Bengal is 50,27,400 mds., that is, about 0.18 million tons. This seems to be an under-estimate of the actual output. Assuming, however, this to be the correct estimate, the calorie values of the entire fish output would approximate to 1.6 billions.[11] Similarly, there is no accurate figure for the meat output of the Province. Taking the annual average output to be about 75 laks of maunds or about 275,000 tons, meat would give roughly 0.5 billion calories.[12] The calorie value that can be derived from the estimated yield of about 600,000 tons of raw sugar would amount to nearly 1.72 billion calories.[13] The annual average yield of mustard oil in Bengal is nearly 140 lak maunds or 146.000 tons. Even if the entire quantity were used for consumption, it would give rise to only about 1.3 billion calories.[14] The energy value of the estimated output of vegetables of 1.64 million tons is about 0.58 billion calories.[15] and that of potatoes of 0.27 million tons is 0.26 billion calories.[16]

The available calories from the present output of the principal food-stuffs of the Province can, therefore, be tabulated as follows :—

TOTAL AVAILABLE FOOD RESOURCES OF BENGAL (APPROXIMATELY)

| Food-stuffs | Million tons | Billion calories |
|---|---|---|
| Grains | 10.00 | 35.84 |
| Milk | 1.25 | 0.90 |
| Fish | 0.18 | 1.60 |
| Meat | 0.27 | 0.50 |
| Raw sugar | 0.60 | 1.72 |
| Mustard oil | 0.14 | 1.30 |
| Vegetables | 1.64 | 0.58 |
| Potato | 0.27 | 0.26 |
| Total | 14.35 | 42.70 |

Thus, the aggregate amount of energy available from the principal sources of food in the Province is about 42.7 billion calories as compared with our minimum need of 51.2 billion calories. So, there is a deficit of about 9½ billion calories. Or, if all the available calories were evenly distributed, the "average man" in Bengal would have a daily ration of 2,340 calories, that is, 460 calories less than what is considered to be the minimum requirement of energy value per head per day. It may be pointed out that according to calculations made by Dr. Radha Kamal

11 1 oz. of fish=25 calories.
12 1 oz. of meat=40 calories.
13 1 oz. of raw sugar=80 calories.
14 1 oz. of vegetable=10 calories (roughly).
15 1 oz. of mustard oil=250 calories.
16 1 oz. of potato=27 calories.

# WHAT IS A FREE STATE?

In a tract entitled "The Free State," Professor D. W. Brogan of Cambridge has contrasted the ideals and practices of a free democratic country with those encouraged under fascist regimes. This tract, published in 1945 was intended mainly for the Germans who had not yet been finally defeated but who were expected to be so defeated in the near future. This tract, it was thought, might help them in making a correct diagonosis of the ills of the German state and in taking appropriate steps for their eradication.

Professor Brogan's main thesis is not that the practices in a free democractic state are always and invariably different from those in a fascist country. But he puts emphasis upon the fact that while those practices under a fascist regime can on no account be objected to and have to be publicly supported by all and sundry, in a democractic state there may always be a vocal minority to oppose them and demand their removal. He refers in this connection to the practice of racialism in Germany and to that of colour bar indulged in by the British and American peoples. In Nazi Germany, it had to be universally applauded. But in Britain and U.S.A. there have always been small groups to oppose and condemn it. It is, however, to be borne in mind that while this small minority in England and the United States has consistently opposed the colour bar, its efforts have never been successful. It is edifying no doubt to find John Jay Clapham making a private pilgrimage to a town where a crime called lynching was committed and making what personal expiation he could of such a crime. But lynching continues all the same, and all efforts to stop it and to stop the unintelligent exercise of other forms of colour bar against the non-white people have so far become wholly abortive. So, inspite of a theoretical difference, a fascist and a so-called democratic state may stand on a par in this particular.

Again, in respect of exploitation of one country by another Professor Brogan observes that while the Germans, after the wars of 1866 and 1870 and still more after the accession to power of the Nazis, would never oppose and condemn it, in England Kipling is out of date and Forster's *A Passage to India* has an increasing number of readers. The past exploitation of Java by the Dutch imperialists has similarly few defenders in the Netherlands. It is, however, not likely that these statements of Professor Brogan will go unchallenged. It is very true that Indian aspirations for freedom have had consistent support in a section of the English people and the similar aspirations of the people of Dutch East Indies are not without support in Holland. But is it not a fact that everything has recently been done to revive Dutch rule in Java which had been rolled up after the German occupation of the Netherlands early in the second World

War and that in regard to India the British Conservative Party is up in arms against the concessions which the British Labour Government had to promise under duress? So here also the difference in outlook is only theoretical and of questionable practical value.

But there are aspects in which the superiority of a free state is beyond question. In such a state, Professor Brogan rightly points out, men of first rate ability and great independence of mind can be harnessed to political work and administration of public affairs. Some may assert that Burke ought to have been Professor of Moral Philosophy at Glasgow instead of being Secretary to Rockingham and ought not to have given to the Party what was meant for mankind. But it should not be ignored that simply because there were parliamentary institutions in England, Burke became attracted to political life and as a result of his being so attracted British public life became chastened and enriched beyond measure. Again, in the United States politics and administration gained considerably in prestige and strength by the contributions which men like Jefferson made and such men were attracted to political life only because of their enthusiasm for freedom and free institutions. On the other hand, in countries governed by despots, it is rare for people of the type of Burke and Jefferson to go near Government headquarters. It is true Goethe served for a time the benevolent despot of Weimar. But as a rule despots would be served and surrounded only by flatterers and left alone by people with any strength and independence of mind. It may, however, be noted in this connection that while this contrast is easily noticeable, it should not be forgotten that free institutions must be really free to enlist the services of men of genius and even of men of any great ability. Not unoften these institutions are so managed and run as to exclude not only men of high ideals but even men of ordinary decency.

One of the important factors of a free state as conceived by Professor Brogan is the existence of a recognised opposition to the Government that be. This opposition may vary from one democratic state to another. The British Parliamentary Opposition is, for instance, different from the opposition which we notice in the U.S.A. This is explained by the fact that while in England they have the parliamentary system, in the U.S.A. is maintained the presidential system of government. But the important fact is that in both countries there is a recognised Opposition not only to criticise the Government but also to take its place when it is ousted by popular vote as a result of this criticism. There are, however, circumstances in which such an opposition may be ineffective. For instance, what kind of government is that under which one religious community is assured of a permanent majority in the legislature and another com-

munity has to be satisfied with a futile opposition ? Under such an arrangement the majority rules without the danger of being reduced to a minority and consequently remains unconcerned as to what the minority community may say or demand. This is the system which has been imposed upon India in the name of democracy and responsible government. It is unfortunate that Professor Brogan thinks, after examining the parties constituted on a religious basis in Holland and pre-Hitler Germany, that " it is very unlikely that in a free state, a majority party can be so constituted." He might have cast a glance at the system inaugurated in a province like Bengal and told us whether that system was an instrument of a free or a fascist state.

Professor Brogan's faith in popular assemblies is again naturally strengthened by his experience of tyrants who so disfigured for years the public life in Europe. He quotes with approval the observation of Lord Acton that " Power tends to corrupt and absolute power tends to corrupt absolutely." A democratic assembly constitutes a great check upon the exercise of absolute power and consequeetly upon the exercise of corruption. In this connection he also quotes with enthusiasm the declaration of Cavour that " the worst chamber is better than the best ante-chamber." By his approval of such observations Professor Brogan really makes himself a revivalist. He wants to revive the prestige which assemblies as an instrument of government lost in the inter-war years. It would have been better for his thesis if he examined the legislative chambers in India and drew upon the experiences he might gain thereby before coming to his conclusion. Popular assemblies may sometimes be so constituted that the best of them may sometimes become as bad as the worst ante-chamber.

In the last few sections of the tract Professor Brogan describes the relations between the civil government and the army in a free state. In such an organisation the army acts only as an instrument of civil power and is never allowed to dominate it. The President of the U.S.A. is also the Commander-in-Chief of the forces and sometimes victorious soldiert like Washington, Jackson and Grant happened to occupy this office. Bus while in Germany a civilian official like Bethmann-Hollweg would don his uniform before appearing before the Reichstag, in the U.S.A. even the soldier-Presidents would never appear except in civilian dress. This would bring out into relief the differences in emphasis in a free and unfree state. Apart from the fact that the army has to work, even during a war, under civil control in order that the free character of the state may be maintained, ultimate efficiency and success also are ensured, by such superintendence and control. In a totalitarian state the army by taking control over everything, may set up a plan of action which may bring forth

brilliant short-time results. It may so mobilise for war purposes the resources of the state as to make its drive irresistible. But this only, on a short-time basis. In case the drive fails, it cannot create new resources and draw upon reserve to meet new situations. "It is squeezing the orange but there is only one orange." Civil control in a free state, on the other hand, may not result in the first plan being as comprehensive and perfect but in the long run it becomes more effective. This has been proved in both the Great Wars fought in this century.

The ideas of Brogan have in this field the support of Lord Hankey who was Secretary to the Committee of Imperial Defence from 1912 to 1938 and Secretary to the British War Cabinet and to the Cabinet from 1916 to 1938 and who, in his Knowles Lectures delivered in Cambridge in 1945 on *Government Control in War*, examined the question "whether a war should be controlled by statesmen or solely by fighting men." Military leaders, he thinks, "have neither the knowledge nor the time" to organise all the material and moral resources of the nation. After the First World War, Sir William Robertson, who had been Chief of the Imperial General Staff, actually observed that "War is not so much a matter for soldiers and sailors as soldiers and sailors sometimes think." He further observed that "the war afforded no confirmation of the view sometimes expressed that the War Minister ought to be a professional soldier." In the grand strategy of the war the views of the Service Chiefs must first be ascertained. But "the last word," Hankey tells us, "must rest with the statesmen who are responsible for policy. They alone have full knowledge of the resources of the nation or alliance of nations at any given moment, and of the probable reaction of this or that operation on hesitant neutral nations." The next question is whether, after the grand strategy has been decided upon and the Commanders have been selected, they should not be given a free hand. As a rule they should be given such a free hand. But there may be occasions when statesmen will be "bound to step in." "If, for example, the strategy of a Commander-in-Chief involves such a drain on the total resources of the State, Empire or Alliance as to imperil the staying power of the nations concerned, or the conduct of some equally essential operation elsewhere, the Governments concerned may have to intervene." Cicero laid down two thousand years ago that "armies can signify but little abroad, unless there be counsel and wise management at home." Such counsel and wise management are for the civil power to secure. By following this principle the Allies lost many battles but won the two great wars and the militarist states, including Japan, by proceeding the other way, won many battles but lost the war. So let us be working for a free state and do our best to eliminate those factors and forces which are at present working against it.

N. C. R.

# THE PLACE OF SCIENTIFIC PHILOSOPHY

PRABASJIBAN CHOUDHURY, M.A., M.Sc.

*Visva-Bharati*

1. The object of this essay is to examine Prof. K. C. Bhattacharyya's view on the relation between Science and Philosophy (as expressed in his article "Concept of Philosophy,"[1] in the light of some developments in scientific philosophy and to suggest some criticism of his attitude. Prof. Bhattacharyya is uncompromisingly 'metaphysical' and does not like philosophy to traffic with science. Yet the human mind cannot be content with a little definite nor is it at rest with the vast indefinite, its constant endeavour is to map out the no-man's land and to reign it with the same laws as are found in his little kingdom of scientific knowledge. In other words, Kant's red signal is disobeyed by all who want to conquer the devouring dark. The result is not so immediately catastrophic as some 'puritans' in philosophy think. And that is the plea for a scientific philosophy. As a tentative philosophy it should be allowed, for it may, even by its failures, paradoxical as it may sound, help the philosopher and the scientist in their search after truth.

2. Let us first state Prof. Bhattacharyya's position. He thinks that the object which philosophy studies is the self-subsistent object and intelligible only with reference to self-consciousness, as such it is quite different from the object studied by science, this (object) being just a fact. Thus the question never arises in science whether the object is knowable or not, it is knowable and usable as of right, "the creed of science, if formulated, would be a pragmatist form of solipsistic idealism." "The concept of the self-subsistent object is the first corrective that philosophy offers of the predatory outlook of the scientific intellect." (*C.I.P.*, p. 75.) Now this being the essential difference between science and philosophy, two important results issue from it :

(1) That we need not confuse philosophy with science as we have done sometimes in such speculations as Kant, for example, undertook regarding the *a priori* principles of pure physics.

(2) We need not confuse science with philosophy as we are doing at present with our Relativity and Quantum Theories in Physics and with our philosophy of evolution regarding them as philosophic truths.

[1] In *Contemporary Indian Philosophy* (Edited by Muirhead and Radhakrishnan). (*C.I.P.* will refer to this book in the body of the essay.)

This confusion is real and is accepted by many Western scientific philosophers including the positivists who point out the boundary line between science and philosophy. What is more significant is that Prof. Bhattacharyya has laid his finger on the root cause of this confusion; he has sharply distinguished the philosophical object from the scientific, the non-discrimination of the two is the original sin which a scientific philosopher commits and is condemned, as a result, to groping in the dark regions of erring thought.

3. We now examine the first result of this non-discrimination of which Kant himself is guilty. Kant took "pure physics as a branch of knowable metaphysics established by deduction from *a priori* principles of synthetic knowledge." (*Ibid.*, p. 76.) As Russell has shown,[2] this is untenable. He says, "Our knowledge of pure geometry is *a priori* but is wholly logical. Our knowledge of physical geometry is synthetic but is not *a priori*." (*Mysticism and Logic*, p. 119.) But Russell has not gone deep enough to the cause of this confusion. Prof. Bhattacharyya does this. He points out that there is an impassable gulf between fact and the self-subsistent object. "The so-called axioms of science are but postulates the formation of which is the work of science itself." (*C.I.P.*, p. 76.) Again, "The postulates of science neither lead to nor are deducible from any metaphysical conception of the object." (*Ibid.*, p. 78.)

4. The second result of non-discrimination between the two objects (the philosophical and the scientific) is more important for the present-day scientific philosophy. We shall first deal with the Relativity and Quantum Theories of Physics which have slowly, through a confusion of thought, acquired the status of philosophical truths. Next we will deal with the Evolutionary philosophy.

5. Prof. Bhattacharyya thinks that the Relativity and Quantum theories are just scientific theories and should not be treated as philosophical concepts.

He writes, "The postulates are hypotheses of a kind which are intended not for the anticipation of facts, but for the organisation of them into a system.....Again there is no passage from a postulate of science to a concept of the object in itself. Whether the real world is four-dimensional or is intrinsically indeterminate in its behaviour can never be determined from the basic conceptual devices that happen to organise the facts of science at the present day." (*Ibid.*, p. 77.) Further he says that "the notion of the objective universe is that of an infinite singular and not of a universal, and an exhaustive division of such a singular into items that are all positive can only be reached if the singular self-evidently unfolds

[2] See his essay "On the Scientific Method in Philosophy" in *Mysticism and Logic*.

itself in them, in other words, if each item means every other item or means the entire system." (*Ibid.*, p. 79.) That is to say, " the concept of the object is not reached through a generalisation of the objective facts of science." (*Ibid.*, p. 70.)

That we cannot justly leap from scientific generalisations to philosophical ones is clearly brought out by the above statements. Russell[3] has given some reasons for not taking the hasty leap, but his reasons, though intelligible, take their origin in a concept of philosophy which is different from that of Prof. Bhattacharyya. For Russell the philosophical object is not the whole of things collectively but all things distributively; for Prof. Bhattacharyya it is a whole whose parts self-evidently involve each other. But for both the objects of science are facts and the problem of knowability or self-consistency of facts falls outside science. Again, for both the philosophical propositions are *a priori*, neither to be proved nor disproved by empirical evidence. So that the reasons which Russell gives against a passage from results of science to philosophical generalisation are understandable, in a way, in the light of Prof. Bhattacharyya's philosophy, which, therefore, is strengthened by them. The reasons which Russell gives are two. First, the scientific generalisations are made on the basis of experienced objects only and so cannot apply to the whole of the universe; the laws, moreover, which science has discovered may be applicable only to the objects selected by science so far for its study (which are just those that are amenable to laws). Secondly, the most general results of science are the least certain and stand in need of perpetual revision. Scientific philosophy which is based on the most general results of science is, therefore, unreliable. (Russell, therefore, recommends a scientific philosophy which, instead of using the results of science, adopts its method only.)

Thus we see that Prof. Bhattacharyya's caution against using scientific postulates in philosophy is sound even from a commonsense point of view. Had his views been generally accepted by so-called popularisers of science who work out ' the philosophical consequences of modern science,' we would be spared of much useless bickering and confusion of thought.

6. We now come to the second result of non-appreciation of the difference between the philosophical and scientific objects, that is, the evolutionary philosophy. Prof. Bhattacharyya accepts a scientific account of evolution as knowledge or hypothesis and also a metaphysical concept of evolution (which need not piece together the results of science) as something believed if not known. But he objects to a philosophy of evolution which utilises the details and specific generalisations of science to illustrate

[3] See *Mysticism and Logic*, pp. 100-109.

the metaphysical concept of evolution and which wrongly thinks that it thereby secures greater certitude. The truth is that biological science studies only some facts of life while cosmic life (with which philosophy deals) is not known as a fact. Though not known as a fact, it may still be believed as self-subsisting and so a purely metaphysical theory about it may be permitted. " The single significant history of this life, however, as rounding off the jagged groupings of facts of science and bridging the gaps left by it, is only imagined, and is understood to be neither self-evident nor verifiable. The significant story of cosmic evolution then is neither science nor philosophy, but only a species of imaginative literature." (*C.I.P.*, p. 76.)

Russell also argues similarly against genrealising broadly on the basis of scientific results which are found true of only a selection of facts in an infinitesimal fragment of space and time. (He adds another objection to evolutionary philosophy ; it is that ethical notions, which are mainly subjective in origin and nature, are involved in our concept of progress that lends so much charm to evolutionism.) Russell's argument is sound but does not involve such marked change in our notion of philosophy and science as does the more calculated argument of Prof. Bhattacharyya.

7. We cannot fully understand Prof. Bhattacharyya's view on the relation between science and philosophy unless we connect it with his entire outlook on philosophy. But to trace or establish that connection is beyond the scope of this short essay. We have stated so far his view on the subject of constructing a philosophy on the basis of scientific generalisations and on deducing a science from *a priori* principles of philosophy. He is against all such procedures. The philosophy constructed on science has " at best a suggestive value for science and an illustrative value for philosophy." (*C.I.P.*, p. 75.) The world-view arrived at by piecing together results of the sciences into more comprehensive schemes " cannot even be claimed to be believed " (*Ibid.*, p. 75). Now it is just here that we feel the cold rigour of a dilectician. We have gone all the way with him but we stop short of his final conclusion. For large generalisations of scientific philosophy, got from the sciences, are not only claiming belief but also guiding much research. In spite of Russell's warning to such a scientific philosophy and his recommending only that kind as adopts only the method (not the results) of science, we see that large generalisations possess for science and philosophy a value which is not merely suggestive for the former and illustrative for the latter, but something more than this. Science, it is true, must study the material and efficient causes and must explain the tangible in terms of the tangible , if philosophical concepts are brought in, they distract attention from the main scientific

problems. Yet these concepts are not mere empty words but " are required, in many cases, for the comprehension of facts, to make the data intelligible." (*Science and Commonsense*, p. 176.) This is the view of W. R. Thomson, the eminent biologist-philosopher. For him philosophy is an intellectual necessity, certain agglomeration of data cannot be reduced to unity in terms of themselves, " to comprehend them we must utilize categories of higher order " (*Ibid.*, p. 189). So he pleads (see *Ibid.*, p. 132) for the recognition of a natural philosophy which will move up and down the plane of the tangible and of the intangible. This is not confusing science and philosophy, rather it helps to distinguish science from philosophy. We can know whether a proposition is scientific or philosophical and judge it accordingly. But this manner of thinking recognises a species of human speculation or discipline more valuable than imaginative literature for science and philosophy, especially for science. This kind of scientific philosophy, we agree with Prof. Bhattacharyya, should not be called a system of knowledge, nevertheless, it claims some belief. We should clearly distinguish a scientific explanation from a philosophical concept, but we must also bear in mind the ultimate end of science which is not merely resolution of sensible facts into sensible relations of them, but it is resolution of them into the intelligible. " Without philosophy, science, as a human effort, cannot reach its goal." (*Ibid.*, p. 190.) This means that philosophy must have a branch which will touch the sciences, that is our scientific or natural philosophy.

8. To make our point of view a bit clear we describe an alternative theory of philosophy. A philosophical hypothesis may be intuited from self-consciousness, as Prof. Bhattacharyya believes, but it may also seek to systematise and explain its data, which are scientific hypotheses and concepts, just as the latter seek to systematise and explain scientific data got from nature by observation and experiment. The only difference seems to be in the *degree of complexity* involved in the verification of the two kinds of hypotheses, the philosophical and the scientific, the philosophical ones being a stage further removed from actuality than the scientific ones. This is responsible for the generally felt vagueness and speculative character of the philosophical concepts in comparison with the scientific ones. But this difference in the degree of confirmability should not lead us to suppose that philosophical confirmation cannot follow the lines of scientific confirmation and that intuition is the only method of verifying philosophical truths. This view is stated by A. C. Benjamin (see *Philosophy of Science*, Vol. 5, No. 4) and is accepted by many, but Prof. Bhattacharyya cannot admit such continuity of philosophy and science. We too realise that a difference in the degree of confirmability

is no trifling matter, but we submit that a philosophical concept (or hypothesis) may be confirmed in two ways, one a peculiarly philosophical one (*i.e.*, intuitive, the test being self-evidence), the other a scientific one (*i.e.*, rational, the test being coherence). Prof. Bhattacharyya's concept of philosophy is rather esoteric and though it is true that one cannot have a science in the region of the supersensuous, yet it is difficult to agree with him that all attempts to reach philosophical concepts from the sensuous field (*i.e.*, from science) is futile, yielding but myth. We are not refuting his central thesis which has a force of its own but we ask, Is not knowledge one systematic whole and is it not profitable to attack the ultimate problems of metaphysics from the sipe of our inner experiences and also from that of our outer ones ? Is it not possible to reach the penetralia of mystery by two routes, one underground and direct, from consciousness, the other overground and indirect, from nature ? Prof. Bhattacharyya has rightly cautioned us against confusing philosophy and science but there may be a mental discipline that, without confusing, seeks to bridge them. The knowledge which it will offer may not be strictly philosophical for the confirmation by the test of self-evidence may not be quite possible, the concepts being not derived purely from self-consciousness. Again, this knowledge may not be strictly scientific because of the complexity and indirectness of the verificatory routes which have to be employed in this case for confirmation (though the *method* may be that of scientific confirmation). This is admitted, and Prof. Bhattacharyya has done a service by showing it clearly how a scientific philosophy cannot in the strict sense yield knowledge. But we maintain that it cannot mislead us either. As a mental discipline it is rightly pursued in modern times by scientists and philosophers both, and has justly acquired the status of a branch of philosophy.

# THE BHOOTAN WAR

## ( 1864-65 )

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### BHOOTAN AND ITS DUARS

NESTLING in the bosom of the Himalayas, to the north-east of Bengal, is the small, obscure principality of Bhootan. The dark forest ranges enclose green and fertile plains like an emerald set in pearls.

" And here were forests ancient as the hills,
Enfolding sunny spots of greenery."

At the base of the lower ranges of the Bhootan hills there is a narrow strip of country, from ten to twenty miles in breadth and extending from the Dhunseeree river, in Assam, on the east, to the river Teesta, or frontier of the Darjeeling district, on the west.[1] This tract, which is by nature singularly rich and fertile, was known as the Bhootan Duars.[2] " These Dooars contain some of the finest cotton and timber lands in Bengal."[3] Mr. Eden, Envoy to Bhootan, thus wrote in his Report about the advantages of the occupation of Bhootan—" The Province is one of the finest in India and under our Government would in a few years become one of the wealthiest. It is the only place I have seen in India in which the theory of European settlement could, in my opinion, take a really practical form."[4] The fertility of the Duars lured the British on to Bhootan. Bhootan, however, retained its insularity for a number of years. The rude civil government was well suited to the primitive habits of the people of Bhootan. At the head of the Government there were nominally two supreme authorities, the Dhurma Raja, the spiritual head, and the Deb Raja, the temporal head.[5] The Dhurma Raja succeeded by incarnation.[6] The Deb Raja was in theory elected by the council of ministers but in practice he was the nominee of whichever of the two Penlows (Governors) of East and West Bhootan happened for the time to be the most power-

1 Claude White, Sikkim and Bhootan, p. 268.
2 *Ibid.*, Mackenzie, North-East Fontier of Bengal, p. 9.
3 Memorandum by Eden, 7 May, 1864, para. 22—Pol. A. Progs., June 1864, No. 125.
4 *Idem*, para. 8.
5 Eden to Government of India, 20 July, 1864, Para. 47—Pol. A. Progs., Sep. 1864, No. 53.
6 *Idem*, para. 48.

ful.[1] There were three Governors—Paro, Tongso and Targa Penlows o: West, East and Central Bhootan respectively.[2] The Jungpens or Soubahs were appointed by the Penlows generally from amongst their own fellows.[3] They commanded the Duar forts such as Dalingkote, Passaka, Sumchee Cherrung, Bijnee, etc.[4]

## Early British Relations with Bhootan

The earliest British relations with Bhootan began in 1772.[5] The Bhootanese set up a claim to the district of Cooch Behar.[6] They invaded and took possession of a great portion of that state and carried off the Raja with the intention of placing on the throne a Raja of their own choice. The Cooch Behar family solicited British aid.[8] A small force under Captain Jones drove the Bhootanese out of Cooch Behar and captured the forts of Daling, Chichacota and Buxa.[9] Teeshoo Lama, the Regent of Tibet interceded and a treaty was made on 25th April, 1774. Warren Hastings availed himself of this opportunity of sending a friendly mission to Tibbet (*i.e.*, Mr. George Bogle's Mission, 1774).[10] Mr. Bogle has given a graphic description of the court ceremonies of Bhootan and of his interview with the Deb Raja at Tassisudon.[11] Warren Hastings sent another mission to Tibet *via* Bhootan, *i.e.*, Captain Turner's Mission, 1783.[12] In 1815 some disputes occurred regarding the Bhootan frontier boundaries and Baboo Kishen Kant Bose was deputed to the court of Bhootan.[13] He has left an interesting report of the country as he found it.[14]

The British Government drove the Burmese out of Assam during the first Anglo-Burma War of 1825-26.[15] From this time began the disputes with the Bhootan Government regarding the Duars. There were seven Duars on the frontier of Assam and eleven on that of Bengal.[16] The British Government renewed and confirmed to the Bhootanese the engagements made with them by the Assamese.[17] These engagements were somewhat

1 *Idem*, para. 49.
2 *Idem*, para. 47.
3 *Idem*, para. 50.
4 Eden's Memorandum, 7 May, 1864, para. 25, *op. cit.*
5 Pemberton's Report, para. 4—Political Missions to Bhootan (Calcutta, 1865).
6 *Ibid.*
7 *Ibid.*
8 *Ibid.*, White, Sikkim and Bhootan, p. 264.
9 Pemberton, para. 12.
10 Bogle's Mission (Markham).
11 *bid.*, pp. 25-26.
12 Pemberton, para. 14.
13 *Idem*, para. 28.
14 Account of Bhootan by Kishen Kant Bose, pp. 187-206—Political Missions to Bhootan.
15 Eden to Government of India, 20 July, 1864, para. 7, *op. cit.* (*i.e.*, Eden's Report).
16 *Ibid.*
17 *Idem*, para. 8.

of a complicated nature and were well calculated to produce the misunderstanding which at a very early date arose between the two Governments.[1] In the first place, though the five Kamrup Duars were held exclusively by the Bhootanese, the two Durrung Duars, *i.e.*, Booree Gama and Kalling, were held under a very peculiar tenure; the British Government occupied them from July to November in each year, whilst the Bhootanese held them for the remainder of the year.[2] Secondly, the tribute was payable in kind.[3] Disputes arose as to the value of the articles of tribute.[4] Middlemen appointed on the frontier to receive the tribute from the Bhootanese officers frequently changed the articles originally sent, substituting others of inferior value.[5] These articles of tribute being sold by auction seldom realised the value at which they were appraised by the Bhootanese, and as each year's tribute in consequence fell short of the fixed amount, a constantly accruing balance was shown against them.[6] The Bhootanese evinced very little inclination to adjust this balance and answered demands for payment by violence and aggression on the British frontier.[7] Thus the relations of the British Government with Bhootan were not placed on a satisfactory basis and comprised the most fruitful elements of future discord. It was decided in 1836 to send a Mission under Captain Pemberton.[8] The Mission seems to have been followed by no satisfactory results, though Captain Pemberton's Report supplied valuable information about Bhootan.[9] When further outrages were committed in 1839 and 1840,[10] Lord Auckland, authorized the annexation of the Assam Duars in 1841; Rs. 10,000 per annum to be given to the Bhootan Government as compensation.[11] The annexation of the Assam Duars is a good illustration of the doctrine that when civilization and barbarism come in contact, the latter must inevitably give way. The isolation of Bhootan was broken by the impact of powerful forces represented by the British Government of India. This ended the first phase of the conflict between Bhootan and the British Government.

### Unsatisfactory Bengal Duars Frontier

The British Government then turned its attention to the unsatisfactory nature of the Bengal Duars frontier. The Bhootcah outrages on this

1 *Ibid.*
2 Pemberton, para. 10.
3 Eden's Report, para. 8.
4 *Ibid.*
5 *Ibid.*
6 *Ibid.*
7 *Ibid.*
8 Pemberton, paras. 2-4.
9 Eden's Report, para. 11.
10 6*Idem*, para. 12. 11 7*Ibid.*

frontier were committed with almost great regularity.[1] In 1855 however matters came to a crisis.[2] The Tongso Pengso Penlow's attitude was very insolent.[3] Col. Jenkins, the Agent to the Governor General on the North-East Fontier, proposed the occupation of the Bengal Duars.[4] Lord Dalhousie threatened the occupation of the Bengal Duars but the Government of Bhootan yielded and sent letters of apology.[5] Further outrages followed and the Bhootan Government refused to comply with the demands of the Government of India.[6] Col. Jenkins again proposed the occupation of the Duars.[7] Sir Frederick Halliday, the Lt. Governor of Bengal visited the frontier and wrote a Minute, dated 5th March, 1857 suggesting that in case the Bhootan Government did not comply with the demands of the British Government for compensation for the outrages committed by the Bhootanese on the British frontier, Ambaree Fallacottah and Jelpaish should be occupied.[8] A British cantonment was established on this frontier at Julpigoree.[9] Further outrages followed and the Pallacottah revenue was attached.[10] At this turn of affairs, the Bhootan Government seems to have shown some anxiety to come to terms with the British Government. Thus the Darlingcote Jungpen wrote to Dr. Campbell, the Superintendent of Darjeeling, that the Dhurma and Deb Rajas had deputed him to discuss the frontier problem with him.[11] But Major Hopkinson, Agent to the Governor General on the North-East Frontier, objected to the interview of the Darlingcote Soubah with Dr. Campbell as he was an officer of inferior position.[12] He wrote to the Bengal Government—"I should not expect much advantage in dealing with the Darlingcote Soubah even were he the accredited Agent of the Deb and Dhurma Rajas, because all experience of Tartar Courts shows the futility of negotiating with agents instead of with principals."[13] Major Hopkinson was in favour of sending a Mission to Bhootan.[14] "It must be remembered that nothing could exceed the distinction, and marked respect and attention to all its wants, with which Captain Pemberton's Mission was everywhere received, and which were continued during the

1 Eden's Report, paras. 15-18.
2 *Idem*, para. 15.
3 *Ibid.*
4 *Ibid.*
5 *Ibid.*
6 *Idem*, para. 16.
7 *Ibid.*
8 *Idem*, para. 18.
9 *Ibid.*
10 0*Ibid.*
11 *Idem*, para. 20.
12 Hopkinson to Bengal Government, 19 Nov., 1861—Pol. A. Progs., Jan., 1862, No. 133.
13 *Ibid.*
14 Hopkinson to Bengal Government, 12 Nov., 1861—Pol. A. Progs., June, 1862, No. 133.

entire period of its stay in Bhootan."[1] If successful the Mission might terminate in the establishment of a permanent Agent at the Bhootan Court, and such an Agency would be the best instrument for paving the way for friendly intercourse with Lhasa.[2] The Lt. Governor of Bengal recommended the latter proposal.[3] It was not necessary that the Agent should be necessarily a European; a Native Vakeel, by whose agency the actual transmission to the ruling power of the representations made by the British Government could be secured would be of great service.[4] Lord Canning preferred the proposal of a Mission "to explain what our demands are, and what we shall do if they are not conceded, and to make our engagement with Sikkim clearly understood by the Booteahs."[5] Lord Canning doubted the advantage of placing an Agent in Bhootan; he thought that this question might be decided after the result of the Mission was known.[6]

## Eden's Mission to Bhootan

In July, 1862 a native messenger, Mokundo Singh, was sent from Assam to Bhootan with letters announcing the intention of the Governor General to send an Envoy.[7] On 11th October, 1862 the Lt. Governor of Bengal, in consequence of the delay in the return of the messenger, suggested to the Government of India that "the mission should be organized on a scale calculated to impress the court with the importance which the British Government attaches to the establishment of clear and decisive relations with the Government of Bootan."[8] In the beginning of December, 1862, Mokundo Singh returned with the information that the Dhurma Raja was not in favour of the mission; he promised to send Zinkaffs for settling the causes of dispute.[9] The Lt. Governor strongly recommended that instead of waiting for these Zinkaffs, the mission should be sent as being the only way in which disputes between the two Governments could be satisfactorily settled.[10] The Government of India, however, thought that it was better to wait for the Zinkaffs.[11] But when the Zinkaffs did not come, the Government of India decided to send the mission. Mr.

1 *Ibid.*
2 *Ibid.*
3 Bengal Government to Government of India, 11 Dec., 1861—Pol. A. Progs., June, 1862, No. 132.
4 *Ibid.*
5 Government of India to Bengal Government, 23 June, 1862—Pol. A. Progs., Jan., 1862, No. 137.
6 *Ibid.*
7 Eden's Report, para. 23.
8 Bengal Government to Government of India, No. 2104, dated 11 Oct., 1862—Eden's Report, para. 23.
9 Eden's Report, para. 24.
10 *Ibid.*
11 *Ibid.*

A. Eden was to lead the mission ; he was accompanied by Captain Godwin Austen as his Assistant, Dr. B. Simpson as Medical Officer, Cheeboo Lama, the Dewan of Sikkim as interpreter and an escort of 100 men under the command of Captain Lance.[1] The Government of India instructed Mr. Eden to make satisfactory arrangements for the rendition of criminals, establish free trade between the two countries, and pay Rs. 2,000 for Fallacotta if the Bhootan Government agreed to surrender captives and restore plundered property.[2] On 10th September, 1863 letters were addressed by the Lt. Governor to the Deb and Dhurma Rajas announcing the intention of the Viceroy to send an Envoy.[3] The Rajas were requested to depute some officer of high rank to meet the mission on the banks of the Teesta and conduct them to their presence.[4]

Eden arrived at Darjeeling in the beginning of November, 1863.[5] No reply having been received from the Deb and Dhurma Rajas, Eden again addressed them on 10th November requesting that the Soubah of Darlingcota might be directed to meet him on the frontier.[6] It was not a favourable time for the sending of the mission for there was complete political confusion in Bhootan.[7] There was civil war going on between two rival factions for power.[8] The Poonakha Soubah had ousted the Deb Raja from power.[9] He was recognised as Deb Raja by the Kaling, Tongso Pillo, the most powerful chief in Bhootan, the Soubahs of East Bhootan subordinate to the Tongso Pillo and the Dalimcota Soubah.[10] The old Deb Raja was supported by the Paro Pillo, the Soubah of Tassisujeeong and by some of the western Soubahs.[11] The ex-Dev was besieged in Tassisujeong.[12] Mr. Eden was of the opinion that Tassisujeong would be captured and the Paro Pillo defeated and the party of Tongso Pillo would come into power.[13]

Eden reported about these complications to the Government and expressed apprehension lest they should impede the progress of the mission.[14] Eden at the same time expressed his willingness to proceed, provided that the nominal head of the Government was disposed to receive him.[15]

1 Buckland, Bengal under the Lt. Governors, p. 303.
2 Government of India to Eden, No. 493, 11 Aug., 1863—Eden's Report, para. 25.
3 Eden's Report, para. 25.
4 *Ibid.*
5 *Idem*, para. 26.
6 Eden to Government of India, 10 Nov., 1863—Pol. A. Progs., Jan., 1864, No. 82.
7 *Ibid.*
8 *Ibid.*
9 *Ibid.*
10 0*Ibid.*
11 1*Ibid.*
12 2*Ibid.*
13 3*Ibid.*
14 4*Ibid.*
15 5*Ibid.*

Towards the end of November, 1863 the Soubah of Dalimcote wrote to Eden that he had received no acknowledgment of the letters of the Lt. Governor which were sent through him to the Deb and Dhurma Rajas; he however intimated a wish to confer with Cheeboo Lama on the frontier.[1] Eden wrote to the Government of India—"I see nothing in the state of affairs in Bootan to incline me to think that any serious difficulties will be placed in the way of the mission."[2] The Dalimcote Soubah told Cheeboo Lama that the mission should not proceed further until a reply was received from the Rajas.[3] Then Eden received the news that the ex-Deb had surrendered and that the Paro Pillo would not be able to hold out single-handed for long against the superior forces of the Tongso Pillo.[4] Eden wrote to the Government—"Altogether our prospects of being able to start at an early date are far more promising than they were."[5] Lord Elgin was of opinion that as the rebellion had been successful and a substantive Government had apparently been re-established, there was no reason why the advance of the mission should any longer be postponed.[6] Lord Elgin thought that the new Deb Raja might be desirous of cultivating good understanding with the British Government in order to strengthen his position.[7]

On 4th January, 1864 the mission left Darjeeling.[8] Every obstacle was put in Eden's way, and he pressed on with the greatest difficulty to Paro and reached Poonakah on 15th March, 1864.[9] Tongso Penlow, the most influential chieftain in Bhootan, refused to discuss Eden's draft treaty, unless the Assam Duars were returned to Bhootan.[10] Eden explained to the Council of Ministers (Amlah) that it was on account of outrages on British territory that the Duars had been resumed many years ago.[11] The question of the Assam Duars was one which had been closed for many years; his instructions did not permit of his even discussing the subject; compensation agreed upon had been regularly paid and the only question connected with the return of land which he was empowered to deal with was the attachment of Ambaree Fallacottah.[12] At this the Tongso Penlow lost his temper, took up the draft treaty,

1 Eden to Government of India, 24 Nov., 1863—Pol. A. Progs., Jan., 1864, No. 84.
2 *Ibid.*
3 Eden to Government of India, 10 Dec., 1863—Pol. A. Progs., Jan., 1864, No. 85.
4 *Ibid.*
5 *Ibid.*
6 Government of India to Eden, 21 Dec., 1863—Pol. A. Progs., Jan., 1864, No. 86.
7 *Ibid.*
8 Eden's Report, para. 27.
9 *Idem*, paras. 27-30 and Eden to Government of India, 21 April, 1864—Pol. A. Progs., June, 1864, No. 123, paras. 4-8.
10 Eden to Government of India, 21 April, 1864, paras. 12-14.
11 *Ibid.*
12 *Ibid.*

crumpled it up and said vehemently, " then we shall have war; you are no body; you have no authority from the Governor General; we do not want Ambaree Fallacottah; and as to the demands of the Government of India, a chupprassee might have been sent to settle them. I will have nothing more to do with you; go."[1]

The mission returned to camp and made preparations for leaving Poonakah.[2] Other members of the Amlah however sent messages requesting Eden to stay at Poonakah as they were willing to sign the treaty.[3] But at the meeting of the Council of Ministers, Tongee Penlow again took up the question of the Assam Duars and when Eden remonstrated he yelled, " I want nothing but the Assam Doars and if I don't get them it is better to have a war than a treaty."[4] Eden was not only insulted, but was compelled, as the only means of ensuring the safe return of the Mission, to sign under protest a document for the renunciation of the Assam Duars.[5] It was only with great difficulty that the mission managed to get out of Bhootan.[6]

## The Bhootan War

Eden suggested to the Government the occupation of the Bengal Duars and non-payment of compensation for the resumed Assam Duars.[7] Sir Cecil Beadon, the Lt. Governor of Bengal, also suggested the occupation of Bengal Duars if the Bhootan Government failed to comply with the demands of the Government of India before 1st September, 1864.[8] Sir John Lawrence despatched a Khureeta to the Deb Raja on 9th June, 1864 repudiating the Treaty made by Eden under compulsion.[9] The Deb Raja was informed that the district of Ambaree Fallacottah, heretofore held in rent from the Bhootan Government was permanently annexed to the British dominions; all payments of rent from that district and of revenues from the Assam Duars to the Bhootan Government had ceased.[10] The Bhootan Government was further ordered to comply with the demands of the British Government for restitution of property and restoration of captives (British subjects) within the last five years, before 1st September, 1864.[11]

1 *Ibid.*
2 *Ibid.*
3 *Ibid.*
4 Eden to Government of India, 21 April, 1864, para. 19.
5 *Idem*, para 23.
6 *Idem*, para 29.
7 Eden's Memorandum, 7 May, 1864—Pol. A. Progs., June, 1864, No. 125, para. 24.
8 Beadon's Minute, 22 July, 1864—Pol. A Progs., Sep., 1864, No. 42.
9 Khureeta to Deb Raja, 9 June, 1864—Pol. A. Progs., June 1864, No. 130.
10 *Ibid.*
11 *Ibid.*

The Government of India resolved to secure the effectual control of the passes from Dewangiri to Dalimcote in the hope that such a blow as the occupation of the Bengal Duars would bring the Bhootan Government to reason.[1] The command of the forces was given to Brigadier General Mulcaster, who was to operate on the right, while the two columns on the left were under the immediate command of Brigadier General Dunsford.[2] The right division was to proceed from Gowhatty and occupy Dewangiri. The right centre column with its base at Gowalparah was to take possession of Sidlee and Bijnee passes. The left centre column at Cooch Behar was to occupy Chichacotta and also Passakha (*i.e.* Buxa). The left column at Julpigooree was to occupy Daling.[3] The Bhooteahs did not offer much serious opposition to the advance of the British troops. At the end of November, 1864 all preparations had been made and the Daling column was the first to move.[4] On 5th December, 1864, the force reached Daling or Dalimcote.[5] The Booteah resistance on the ridge adjoining the fort was overcome[6]; the Punjabees took the fort by escalade through the breach caused in the tower by the Armstrong gun.[7] Four days later the fort of Dumsong was taken, and the troops moving further east reached Chumurchi fort, which was captured on 2nd January, 1865, after a slight skirmish.[8]

The left column occupied Chichikota,[9] the Bhotanese frontier post on the Buxa Duar, and then on 7th December, 1864 took possession of Buxa without much opposition.[10] The Booteahs offered resistance at the Balla Pass, commanding the Luchee Duar, but were driven off.[11]

The right and right centre division working in concert under Mulcaster, though meeting with some resistance at Durrangarh Pass, occupied Dewangiri after a feeble resistance.[12] The force then occupied Bishen Singh on 8th January, 1865.[13]

[1] Government of India to Bengal Government, 12 Sept., 1864—Pol. A. Progs., Dec., 1864, No. 6.
[2] White, Sikkim and Bhutan, p. 277; Rennio, Bhootan and the Story of the Dooar War, pp. 163-164.
[3] Quarter Master General to Government of India, 8 Sep., 1864—Military Progs., Dec., 1864, No. 7; Progs. of Government of India (Foreign Dept.), No. 421, dated 26 Aug., 1864; Pol. A. Progs., Sep., 1864, No. 44, p. 98.
[4] Shakespeare.
[5] *Ibid.*
[6] Diary of Assistant Commissioner—Pol. A. Progs., Dec., 1864, No. 220; Renee, 170-173.
[7] McGregor, Life and Opinions, I, pp.. 227-228; Journal of Chief Civil Officer with Dooar Force; Pol. A. Progs., Dec., 1864, No. 219.
[8] Shakespeare, 98; McGregor, 231-232; Renee, 175-180; Dunsford to Government of India, 1 Jan., 1865—Military Progs., Jan., 1865, No. 95.
[9] Lance to Haughton, 7 Dec., 1864—Pol. A. Progs., Dec., 1864, No. 223.
[10] Renee, 183.
[11] Watson to Major of Brigade, 22 Dec., 1864—Military Progs. Jan., 1865, No. 264.
[12] Metcalfe to Haughton, 11 Dec., 1864—Pol. A. Progs., Dec., 1864, No. 224; Metcalfe to Haughton, 21 Dec.. 1864—Pol. A. Progs., Jan., 1865, No. 68.
[13] Metcalfe to Haughton, 10 Jan., 1865—Pol. A. Progs., Feb., 1865, No. 81B.

The operation were conducted successfully, the Duars were occupied and the hill forts commanding the passes were captured by January, 1865. The plan of the Bhootan Government seems to have been to effect an orderly retreat before the advancing powerful British forces and then to make a concerted sudden attack on strategical positions. The Bhootanese attacked the whole line of posts from Chamurchi to Dewangiri towards the end of January and beginning of February, 1865.[1] Dewangiri was attacked on 30th January by a large Bhooteah force led by Tongso Pillo and seven other chiefs.[2] On 1st February the Bhooteahs advanced and took up a position behind the high ground to the east end of Dewangiri hill and notwithstanding an attempt which was made to dislodge them, they held that post during the day, and on the following night advanced their position and built a strong stockade on the top of the hill commanding the whole ridge.[3] From this place the Bhooteahs kept up a sharp fire, cut off the water-supply of Dewangiri and entered the British camp under cover of darkness and carried off all the live-stock.[4] Attempts were made to send reinforcements to the hard pressed Dewangiri garrison.[5] Captain Cunliffe with 40 men endeavoured to reach Dewangiri by the Durrunga Pass.[6] He advanced as far as the last ascent to Dewangiri, but seeing large bodies of the enemy stealing round to his rear, he relinquished the attempt and returned to Koomree Katta.[7] The garrison who had seen Captain Cunliffe's retreat, determined to evacuate Dewangiri.[8] The artillery, provisions and the wounded fell into the hands of the Bhooteahs.[9] The Bhooteahs, enboldened by the evacuation of the place followed the rear guard down to the village of Soobankatta, where the Police under Captain Macdonald, facing round, attacked the enemy and drove them off.[10] The retreating force was compelled to abandon two guns which were carried off by Tongso Pillo.[11] No one could have foretold " a retreat of so cowardly a conception, so bad a management, or so disastrous a result."[12]

The force at Balla was no better prepared against surprise attack than Dewangiri and on the morning of 30th January, the stockade was suddenly

1 White, 278.
2 Telegram from Haughton to Lt. Governor, 5 Feb., 1865—Pol. A. Progs., Feb., 1865, No. 207.
3 Driberg to Mulcaster, 7 Feb., 1865—Military Progs., Feb., 1865, No. 348.
4 *Ibid* and Metcalfe to Haughton, 11 Feb., 1865—Pol. A. Progs., March, 1865, No. 273.
5 *Ibid.*
6 *Ibid.*
7 *Ibid.*
8 *Ibid.*
9 *Ibid*, Renee, 196-200.
10 *Ibid.*
11 McGregor, I, 235.
12 *Ibid.*

ttacked, though unsuccessfully.[1] Next morning the British force dis-overed that enemy breastworks and stockades bristled in every direction.[2] Reinforcements arrived under Col. Watson, but all efforts to drive the nemy out of his stockades failed.[3] Then Col. Watson feigned a retreat.[4] This manoeuvre was successful; the Bhooteahs came out in pursuit, but eing turned upon and charged with the bayonet and Kookree, as well s by the Sowars, several of them were cut up.[5] On 4th February, Col. Watson, however, evacuated Balla and Brigadier General Dunsford marched t the head of his troops to retake it.[6]

On 27th January the attack on Bishen Singh was repulsed.[7] Buxa vas attacked on 7th February but it was gallantly defended.[8] Chumurchi vas also threatened, though not very seriously.[9]

This change in the aspect of affairs necessitated the sending of rein-orcements to the frontier.[10] Brigadiers General Tombs and Tytler eplaced Mulcaster and Dunsford.[11] Both these generals were given ndependent commands, the former of the Right and the latter of the Left Brigade.[12]

Bala was captured on 16th March, 1865 by the force under the command of General Tytler.[13] A flanking party under Captain Ruggles crossed he Toorsa and commanded the ascent of the spur leading to the left of he enemy's position.[14] Slow fire was opened from the guns and mortars n the Tazagaon stockade, with the view of keeping the attention of the nemy directed to their immediate front.[15] The ruse succeeded so well hat not an eye was turned towards the direction from which danger was apidly approaching.[16] The Bhooteahs were completely taken by surprise nd their stockade was captured.[17]

General Tytler gave the enemy 24 hours' notice to abandon and destroy heir stockades at Buxa or stand an attack.[18] The Bhooteahs retired rom Buxa.[19]

1 *Ibid.* 2 *Ibid.*
3 Watson to McGregor, 4 Feb., 1865—Military Progs., Feb., 1865, No. 487.
4 *Ibid.* 5 *Ibid.*
6 Telegram from Haughton to Lt. Governor, 4 Feb., 1865—Pol. A. Progs., Feb., 1865, No. 205.
7 Metcalfe to Haughton, 30 Jan., 1865—Pol. A. Progs., Feb., 1865, No. 230.
8 D.C., Cooch-Behar, to Lt. Governor, 8 Feb., 1865—Pol. A. Progs., Feb., 1865, No. 209.
9 McGregor, 237; White, 279.
10 White, 270.
11 *Ibid.*
12 *Ibid.*
13 Tytler to Adjutant General, 17 March, 1865—Military Progs., March, 1865, No. 766.
14 *Ibid.*
15 *Ibid.*
16 *Ibid.*
17 *Ibid.*
18 Telegram from Tytler to Adjutant General, 23 March, 1865—Military Progs., March, 875, No. 799.
19 Telegram from D.C. Cooch-Behar, to Lt. Governor, 24 March, 1865—Pol. A. Progs., April, 865, No. 136.

Dewangiri was attacked on the morning of 2nd April, 1865. The affair was brilliantly managed and was attended with thorough and complete success. [1]

## Diplomacy at Work

Before the rains set in, the Government of India adopted certain measures for the defence of the frontier and planned the expedition against Bhootan in the cold season.[2] In the mean time diplomacy was at work. On 5th June, 1865, Lord Lawrence warned the Dhurma and Dev Rajas that unless they submitted and made amends for the misconduct of their people, he would send more troops further into their country and "shall attack you and destroy you."[3] Lord Lawrence added—"The longer you resist, the worse will your condition be."[4] On 24th June the Assistant Commissioner, Julpigooree forwarded letters received from the Deb Raja intimating that he was sending three of his officers to Balla to make peace.[5] The Government of India therefore issued the following instructions to the Bengal Government for conducting negotiations[6] :—

(*i*) "The best security for good and peaceful conduct, heretofore on the part of the Bhooteah Government is that, on the one hand, they should see and understand that the British Government has both the power and the will to punish them if they offend; on the other, that we hold out to them some inducement to maintain peaceful and orderly relations."

(*ii*) "The Bhootan Government should accept Eden's draft treaty, particularly the conditions laid down in Art. IV."

(*iii*) In return the British Government would make a yearly payment of Rs. 25,000, as an act of grace in consideration of the assumption by the British Government of the Duars. "The payment of this sum, liable as it will be to stoppage in the event of our border being again exposed to violation, will prove an excellent and powerful guarantee for the peaceful conduct of the Bhooteahs in future."

(*iv*) Lt. Colonel Bruce, Commissioner of Cooch Behar, was authorized to conduct negotiations.

The Deb Raja wrote a letter (4th July, 1865) to Lord Lawrence requesting that the Duars should be restored to him.[7] The Dhurma Raja

[1] Hopkinson to Lt. Governor, 2 April, 1865—Pol. A. Progs., April, 1865, No. 152; J. H. Thornton, Memories of Seven Campaigns, pp. 139-141.
[2] Political Despatch to Secretary of State, No. 68, 16 June, 1865.
[3] Lawrence to Deb and Dhurma Rajas, 5 June, 1865—Parl. Papers, 1866 (13), p. 5.
[4] *Ibid.*
[5] Assistant Commissioner, Julpigooree, to Bengal Government, 24 June, 1865; Dev Raja's letter, p. 8—Parl. Papers, *op. cit.*
[6] Government of India to Bengal Government, 20 July, 1865—Parl. Papers, pp. 10-11.
[7] Deb Raja to Lawrence, 4 July, 1865—Parl. Papers, pp. 12-13.

wrote to the Viceroy—" The dooars of Bhootan which the British Government out of friendship for me have given me, may be left as before, and they will derive no advantage from urging a war with this country."[1] Sir John Lawrence wrote to the Rajas on 19th August, 1865, that the Duars could not be restored " not because we desire to retain any portion of the country, but because the retention of that tract is a just punishment for the many acts of misconduct on the part of your people, notwithstanding the forbearance and kindness of this Government during the past fifty years."[2] Col. Bruce wrote to the Deb Raja—" Whether there shall be peace without war, rests with you. Peace the Viceroy is determined to have, even should war unfortunately be the only means of arriving at it."[3]

The letter from the Deb Raja, dated 13th July, 1865 intimated that he was willing to return Eden's Treaty.[4] Col. Bruce wrote to the Rajas on 11th August, 1865 that he could not enter into negotiations unless the Bhootan Government acknowledged the surrender of all the Bengal Duars and lower hills, returned Eden's Treaty and made apologies for the misconduct to Eden, and also set at liberty British subjects detained in Bhootan.[5] In return the British Government would give to the Bhootan Government an annual allowance of not less than Rs. 25,000 to be hereafter increased to the maximum sum of Rs. 50,000, pending good behaviour.[6]

But the Bhootan Government found it very difficult to reconcile itself to the loss of the Duars. On 13th September, 1865 the Deb Raja wrote a letter to Col. Bruce in which he expressed his feelings against the British Government in a rather outspoken manner—" You wish to keep the dooars under you and to give me Rs. 25,000 which shows that you are not inclined to make peace, but rather to do injustice.....Last year I had only a few men in the dooars, and you suddenly fell on them as a robber. The dooars have not yet been taken by fair force of arms.... My agents had full powers to negotiate, but you spoke entirely on a narrow policy (*i.e.*, the four conditions) and offered me an arbitrary sum instead of the dooars. On such terms nobody can treat....You speak of making peace in your mouth, but at the same time keep in view the ascending of the hills. This is certainly alarming."[7] On 23rd September Lord Lawrence wrote to the Rajas that nothing short of their " absolute submission " would avert hostilities.[8]

1 Dhurma Raja to Lawrence, 4 July, 1865, pp. 12-13.
2 Khureeta to Rajas, 19 Aug., 1865, Parl. Papers. p. 13,
3 Bruce to Deb Raja, 9 Aug., 1865, p. 15.
4 Letter from Deb Raja, 13 July, 1865, p. 17.
5 Bruce to Deb Raja, 11 Aug., 1865, p. 16.
6 *Ibid.*
7 Bruce to Bengal Government, 13 Nov., 1865—Pol. A. Progs., Dec., 1865, No. 61.
8 Bruce to Lt. Governor, 11 Nov., 1865—Pol. A. Progs., Nov., 1865, No. 123.

The Bhootan Government yielded. The peace conference was held at Sinchula from 4th to 8th November, 1865, where Col. Bruce conducted negotiations with the Bhooteah officers.[1] The Treaty signed by Eden under compulsion was surrendered to Col. Bruce on 8th November and the letter from the Deb Raja apologising for the insults offered to Eden was also handed over to Col. Bruce.[2] The Treaty was concluded on 11th November, 1865.[3] Under this Treaty[4] the Bhootan Government retained possession of the Assam and Bengal Duars; the boundary was to be fixed by the British Commissioner. The Bhootan Government agreed to surrender all British subjects detained in Bhootan against their will; to the mutual extradition of criminals; to the maintenance of free trade; to the arbitration of the British Government in all disputes between the Bhootan Government and the Chiefs of Cooch Behar and Sikkim. The British Government undertook to pay to the Bhootan Government an annual sum beginning with Rs. 25,000; on January 10 following the first payment, Rs. 35,000; on January 10 following, Rs. 45,000; on every succeeding January 10, Rs. 50,000. The British Government had the right at any time to suspend the payment of this compensation money in whole or in part, in the event of misconduct on the part of the Bhootan Government, or its failure to check the aggression on its subjects to comply with the provisions of this Treaty.

A separate agreement was also signed by which the envoys agreed on behalf of the Bhootan Government to compel the Tongso Pillo to deliver up the two guns (captured at Dewangiri) within two months from the date of the agreement.[5] As the guns were not surrendered, a small force under Colonel Richardson started from Dewangiri in February, 1866; it had advanced only a few days' march and seized the bridge at Sahlia over the Monas when the two guns were surrendered on the 25th February, 1866 to Colonel Richardson and the force returned.[6]

Thus ended the Bhootan war. The rich and fertile Duars had been the bone of contention between the rival powers. The Duars were of vital importance to the Bhootan Government. Lord Lawrence in his despatch to Sir Charles Wood (22nd November, 1865) confessed—"These form the principal source of income to the Chiefs of Bhootan, and by their

1 Treaty with Bhootan—Pol. A. Progs., Dec., 1865, No. 62.
2 Bruce to Bengal Government, 13 Nov., 1865—Pol. A. Progs., Dec., 1865, No. 61. Bruce to Lt. Governor, 11 Nov., 1865—Pol. A. Progs., Nov., 1865, No. 123.
3 Treaty with Bhootan—Pol. A. Progs., Dec., 1865, No. 62.
5 Bruce to Bengal Government, 13 Nov., 1865—Pol. A. Progs., Dec., 1865, No. 61.
6 Grey to Richardson, 23 Feb., 1866—Pol. A. Progs., April, 1866, No. 20, Buckland, Bengal under the Lt. Governor, 1, 308.

annexation we deprive them of their main income."[1] But the Duars were of equally great advantage to the British Government. Eden wrote in his Report about these Duars—"Under a good government the whole tract would be one vast rice field. I imagine that finer soil for the production of cotton does not exist in India."[2] The struggle for the possession of this fertile tract lay in the logic of history.

Neither the Deb Raja's childlike faith in the powers of the Bhootan gods,[3] nor the Tongso Pillo's championship of the rights of Bhootan could check the advance of the British power to the foot of the Bhootan hills. "It is futile to expect to race bullock carts with motor cars, or to return to the charge of machine guns with a shower of arrows. They who have power will use it for themselves, a simple political truth and yet so hard to digest. The Zeit Geist is ruthless in its march. The patriotism of Brutus did not avail against the inevitable death of the Roman Republic any more than the patriotic but sentimental phillipics of Demosthenes had availed to stem the rising tide of Macedonian power."[4]

1 Political Despatch to Wood, 22 Nov., 1865, No. 162
2 Eden's Report, para. 27.
3 Deb Raja to Lawrence, 4 July, 1865—Parl. Papers, 1866 (13), pp. 12-13.
4 A. R. Wadia, Civilisation as a Co-operative Adventure, p. 37.

# Round the World

**Meeting of the Constituent Assembly—**

The first meeting of the Constituent Assembly as provided for in the Cabinet Mission Statement of May 16, 1946, was held on the 9th December last. The Assembly is a large body consisting of 296 members from British India and when at a later stage the Indian States will join it, they will contribute another group of 93 members. So the total strength is likely to be 389. To house an assembly of this numerical strength was a problem which was solved by re-arranging the Legislative Assembly Library Hall at New Delhi. In the December session of course the problem of space had not arisen as the States had not yet entered this body and the members elected on the Moslem League ticket had refrained from attending. But although the Assembly was not in its full strength when it met for the first time, it was an impressive gathering. The members from different provinces were accommodated in different aisles and in their varied dresses they presented a spectacle pleasing to the visitors who thronged all the galleries provided for them. It cannot be said, of course, that every province selected its best and most appropriate talent for its representation in this Assembly which, it is hoped, will find it possible to build during the next one year the constitutional frame-work of our country. But it must be said that from the standpoint of ability, experience, reputation and sacrifice for the country's advancement, the Constituent Assembly which registered its birth on the 9th December would not go down to history as in any way inferior to a like assembly of any other country and of any other period of history. Jefferson scanning the list of delegates from his own State of Virginia to the Federal Convention at Philadelphia had exclaimed that it was an assembly of demi-gods. The New Delhi Assembly may not consist of demi-gods but there are some at least in their membership who are not less esteemed by their countrymen than demi-gods.

Those who decided upon the preliminary procedure for the first sittings of the Assembly might have possibly so arranged it as to enable the members to choose its permanent President at once. In that case his name would have been associated with the opening day of the Assembly which was pre-eminently a ceremonial day. The procedure chalked out was, however, different and Dr. Rajendra Prasad whose election as permanent President was declared two days later was in the crowded benches among other members of the house when the first ceremony was performed. Even the inaugural address could not be associated with his name. This does not of course mean that the person who by virtue of his age was called upon to take the chair on the first two days was by any standard unsuited to the office and the occsaion. Dr. Sachchidananda Sinha is not only the oldest member of the Assembly but is a man of rich ex-

perience, high honour and great ability. For half a century he has been not only an important political figure in his own province of Bihar but has been well known throughout the country for his unstinted political service to the nation. Among the high offices which he has held in course of his long career are the Finance Membership of the Governor's Executive Council of Bihar and the Vice-Chancellorship of the Patna University. He took about twenty minutes to read his address which was eminently suited to the inauguration ceremony over which he presided. It is needless to say that it was received with great cordiality by all sections of the house. The address over, one by one the members appeared before the Secretary's table, submitted their credentials and signed the ornamented register. It was the Madras group which was called first and incidentally it may be pointed out that Mr. C. Rajagopalachari's name headed the list.

When the election of the permanent President was declared, it was greeted in several speeches one of which was delivered in his characteristic style by Sir Sarvapalli Radhakrisnan. Dr. Prasad is certainly one of the most beloved of India's statesmen brought to the front in the Gandhi age. A distinguished alumnus of the University of Calcutta and a former member of the Calcutta Bar Association he naturally shifted his activities to his own province when it was created in 1912. But though Bihar has been the nucleus of his political work, it alone could not hold his reputation for long. Since the days of the Non-co-operation Movement he has been an all-India figure and his contribution both in service and sacrifice to the national regeneration has been second to that of none in the country. A man of solid education and great intellectual power, he has never been included among the intellectuals. This is because he has all along borne his high education very lightly and when an intellectual approach to any problem is possible and he is immensely capable of such an approach he would keep his intellect in the background and tackle it in his own simple matter of fact way. His coolness and courtesy are well known. But less known is his firmness on crucial occasions. This quiet strength he possesses in so abundant a degree will be his greatest asset as President of the Constituent Assembly.

After the Assembly elected its President, it adopted a resolution empowering the staff selected by the Government to carry on the office work of the Assembly pending the appointment of its own officers on a permanent basis. Thereafter Pandit Nehru introduced a resolution in which the objectives of the Constituent Assembly were delineated. The kind of constitution which the Assembly intended to frame, the kind of government which would be established under it and the type of rights and privileges which the citizens would enjoy and exercise in the new dispensation were emphasised in this resolution. Pandit Nehru did not of course confine himself to the subject matter of the resolution in course of his long speech. But as usual he spoke well and convincingly. He pointed out that they might make the resolution too detailed and therefore too long or too general and therefore too short. But he had decided to take a middle course and the resolution he placed before the house was neither too general nor too

detailed. The Right Hon'ble Mr. M. R. Jayakar moved an amendment so that further discussion of the resolution might be postponed to its next session. His point was that as the Moslem League members had not joined the Assembly yet, no resolution should be adopted providing for its objectives in their absence. Dr. Syamaprasad Mookerjee who spoke on the resolution in extenso very ably and effectively countered the arguments of Mr. Jayakar and wanted the Assembly to adopt the resolution in the December session. But as the members were mostly in a mood of compromise, it was held over for the next session which would meet in January. The other item of work which the Assembly undertook in that session was the formulation of the rules of procedure according to which the Assembly and its Sections would work. The matter was referred to a Committee which reported at the fag end of the session. But its report was adopted after some discussion, though a few items, the rules about which might involve controversy, are reported to have been left out to be dealt with later. So ended the first session of the Constituent Assembly which was held under the shadow of the British Cabinet Decision of December 6.

**Sugar Supply and Sugar Production—**

Shortage of sugar available for supply is indicated by the fact that less than one *powa* is allowed to an individual ration card-holder per week. The Sugar Controller of the Government of India has not held out to us any prospect of increasing this supply in 1947 in a statement which he made recently through the All-India Radio. He tells us that if there is any improvement at all, it is likely to be to the extent of about ten per cent. only. The Government of India is of course doing its best to bring in supplies from other countries but as the condition of production is everywhere unsatisfactory, the prospect of imports is also not encouraging. The question now is what amount is produced in India and what amount is in demand for consumption. We are told that the total demand is sixteen lakh tons and the production is about eleven lakh tons. So there is a deficit of about 33%. It seems that during the years of the war demand for sugar considerably increased and that in post-war years also this increased demand is being maintained. In 1939-40 only twelve and a half lakh tons of sugar were produced in India but only about seven and a half lakh tons could be disposed of. In the following year production was reduced to ten and a half lakh tons but as five lakh tons were already in hand, the total supply for the year was fifteen and a half lakh tons. But this could not certainly be disposed of. Consequently in 1941-42 production was further lowered still and it had to be less than ten lakh tons. In fact the estimate is that about that time total demand was even less than eight lakh tons. So it appears that demand has been doubled since 1941. How is this to be explained ? Does this demand represent exclusively the demand of the Indian people (*i.e.*, people resident in India) or some good portion of it is represented by exports to other countries ? This is a very pertinent question. We remember that although the International Sugar Agreement of 1937 prohibited the export of Indian sugar by sea, the International Sugar Committee relaxed this prohibition early in the

war period and allowed 2 lakhs of tons to be so exported. But this export would not include any export made by road which was not restricted. Actually however the new road facility created through Beluchistan to Iran made possible a good amount of export through that channel. Besides, though black-marketing of sugar is very much noticeable in India, it was still less profitable than black-marketing in Iran where until recently sugar would sell at nine or ten rupees per seer. So the Government of India should be absolutely sure as to the exact demand for sugar in India, before thinking of increasing the supplies. We are told that the Government of India has actually decided by way of increasing sugar supplies to permit the establishment of forty-five new sugar mills in the country during the next five years. But we should repeat the warning that the Government of India should before carrying out this plan make itself certain that the increased demand is the demand for consumption by the people resident in India and that this demand is likely to be permanent. In case this demand does not represent increased consumption in India, it will fall off with the growth of production elsewhere, and the Indian sugar mills will be in a precarious condition in the near future as they happened to be some years before the new demand was created.

**Power and Its Exercise—**

In a recent issue of the Political Science Quarterly a writer discusses some fundamental issues on power and its exercise in a paper on *Lincoln in Power*.

" The problem of power has always been important to thoughtful students of politics ; " he observes, " it has never been more acute than now. I mean by power, the control or influence that a man may have over the lives and destinies of others. The problem is acute now because we have, in modern times, enlarged the influence of men in office while we have, at the same time, increased the expectation of all men for freedom and self-government. Herein lies a paradox that is little understood and in no way taken care of....It may be that a search into the facts of Lincoln's life for exemplification of the principles of power may give us some hints as to how we should proceed toward solution of this problem. Power corrupts, we are told ; and we ought, if we can, to find out if Lincoln was corrupted and if not what was in him that resisted the effect of his four years in office. That he had only four years may be one of the things that protected him against deterioration. He hardly had time to change. There is also the fact that he was plunged into crisis at the same time that he was given his post. It is in times of the gravest danger that men are likely to rise above themselves. If power inevitably corrupts, it seems to have its worst effects in times when men can sink to their ordinary level of personality and to be least damaging to the soul when great danger must be faced." The explanation given above for Lincoln's remaining uncorrupted during his tenure of office is only partial. In fact it may be said, as the author of the paper has said himself, that Lincoln did not actually rise above all the limitations which the holding of a powerful office imposes upon a person. Plato has spoken of philo-

sopher kings. But in the work-a-day world there may be only philosophers or there may be only kings but the combination of the two is not a practicable proposition. "Looking at men in power does not lead us confidently to the belief that any combination of kingly qualities and philosophic wisdom is likely to be exercised by one at any time in his life. He may be philosopher when out of office, like Balfour, Haldane or Morley. He may be philosopher during a campaign to settle the issues, as Madison and Hamilton were while writing the *Federalist*. But to be a philosopher and king at the same time is something far more difficult than to exercise alternately the two sets of qualities that are sometimes found together in one personality. Marcus Aurelius may be an exception but that would leave us with a further problem. How much is a stoic essayist really a philosopher and how much is an overwrought soul finding escape from the philosophic problem of government in moralizing on human destiny? Plato may have intended to state an impossible combination. At any rate, we can see that the exercise of power is a process of such a nature that a man can seldom be philosopher while he is busy being king." About Lincoln only this much can be said that "he was a good king." But like all kings "he seems to have been too busy to be a philosopher."

**Public Opinion polls and Democracy—**

If the trends of public opinion can be properly gauged on any issue at any given time, it may certainly help a good deal in the working of political democracies. In fact the ballot box may by such polls be supplemented in important ways. A writer in discussing this subject in the same journal observes: "Public opinion polling as now carried on by Gallup, Roper, Crossley, the National Opinion Research Centre and others is a young art but already in a dozen years or so of development the polls have reached a place where they are influencing the political process in this country. Not only is it becoming generally accepted that the polls can predict elections with but a small margin of error, but they also are doing something much more important—they are reporting public attitudes on current issues." But although the art has developed a great deal in recent years, it has still large opportunities of improvement. "The reliability of the results from polling may be said to depend on the correct performance of four different operations. These operations are: (1) choosing the right people to interview; (2) preparing an appropriate set of questions to ask these people; (3) conducting the interviews successfully, that is to say, asking the questions and getting satisfactory answers properly recorded; and (4) tabulating the results of the interviews, analysing the tabulations, and drawing right conclusions from them." The first of these operations, *e.g.*, choosing the persons for interview, involves the problem of sampling. To interview a very large body of people would require an expenditure of an impossible character. So out of a population of one hundred and thirty million only about three thousand are to be chosen for interview. It may be said that while further improvement is possible in the technique of this sampling, it has already attained high efficiency.

It is really in the interview process that further research is desirable and further improvement is possible.

**Emperor and Public Opinion in Japan Today—**

A writer in the September issue of the Pacific Affairs analyses the election which was held in April, 1946, in Japan. He observes : "The general conservatism of this election must be explained by the fact that the great majority of the Japanese are still conservative in their political thinking, notwithstanding the shock and disillusionment of defeat or the serious economic crisis. Much of this conservatism, however, is not so directly concerned with tangible political and economic issues, for the average Japanese today welcomes most reforms, if for no other reason than that " reform " seems to be the proper thing to support. But in defeat the average Japanese also believes that his nation must have at least one refuge, if only a mental or spiritual one. With their country now at the nadir of its career, the Japanese find a peculiar consolation in what seems to them to be one thing sufficiently immutable to survive this national catastrophe. This last refuge to which many Japanese have turned is the Throne. Contrary to reports of mass demonstrations before the palace by hunger marchers and other distressed groups, it is only the embittered Communists who have called for the overthrow of the imperial institution. Most Japanese still revere and admire the Tenno System, regardless of Hirohito's recent denial of personal divinity, and believe that the Tenno System is not incompatible with any parti cular form of government. Despite inconsistencies in Japanese thinking on this point, it is only by knowing how the Japanese feel on the subject of the Tenno System that we can understand their post-war political behaviour." Many Japanese, we are told, voted for Progressive or Liberal candidates more out of fear than out of preference. They might not have regarded these candidates as representing sufficiently advanced social and economic views. But they voted for them lest their Communist opponents should secure larger support and get returned. They feared that these Communist candidates if returned in suffi- cient number would " attempt to tamper with the Tenno System or to abolish it altogether." In the end the Communist Party succeeded in returning only five members to the Diet.

# Reviews and Notices of Books

**Vishal Bangla.**—By Prof. Radha Kamal Mukhopadhyay. Published by the Saraswaty Library, Calcutta. Pp. 55. Price Re. 1.

This booklet (in Bengali) is an outstanding creation of a wellknown professor showing how "Great Bengal" flourished during the dark ages of the West, spreading her culture, art and commerce in Asia, Africa and Europe, till the activities of the successive Dutch, French and British trading corporations operating in India brought about her downfall.

The author has traced the causes of this collapse to the political and economic ascendency of the British in India. He has also shown how physical changes primarily contributed to bring about Bengal's miseries in the shape of poverty and disease. The frequent changes of the courses of the Ganges and Brahmaputra, with their tributaries have given rise to social and commercial changes in Bengal bringing decline and disease with them. The writer suggests the control of these rivers for the restoration of Bengal's prosperity.

Every son and daughter of Bengal should make a point of carefully studying this booklet.

J. CHAKRAVORTI

**Churchill's Blind-Spot: India**—with bibliography and index by N. G. Jog. Published by the New Book Company, 188-190, Hornby Road, Bombay. Pp. 228. Price Rs. 5.

In this book the author has reviewed in successive chapters the different factors which he considers responsible for the attitude of Mr. Churchill towards the Indian problem. Commencing with his brief stay in India as a junior officer in a Hussar regiment, it is shown how his family connections as well as his own pushing nature made it possible for him to enjoy certain opportunities of acquiring experience in Indian affairs which, however, was confined to a limited sphere only as also how it was then that he formulated his theory of Imperial Democracy to which he has adhered consistently all through his life. The lessons he learnt from his father no less than his contact with Lord Morley convinced him about the correctness of the opinion he had formed at almost the very beginning of his career. With his election as a member of the House of Commons, Mr. Churchill came under the influence of Lord Birkenhead in whom he found a congenial soul. We have next an account of the events which led to the adoption of complete independence as the goal of the Congress and a brilliant analysis of the seven cardinal principles of the Churchillian policy towards India. Their utter worthlessness is shown and the conclusion drawn that "the real foundation of British rule in India lies in the latter's material atility to Britain."

The next three chapters (Chapters X-XII) give an account of the unremitting campaign carried on by Mr. Churchill against the cabinets responsible for the

India Act of 1935 and how for this purpose he had to change his political affiliations. Almost every one who resents Mr. Churchill's mainly unjustifiable attacks on Indian Nationalism will read with relish the comparatively unknown but very interesting and documented account of the evidence he offered before the Joint Committee on Indian Reforms to which two chapters (Chapters XIV and XV) are devoted when the members, British and Indian, belonging to different racial and political groups by clever cross examination held up to public ridicule all the opinions on Indian affairs he had put forward in the Memorandum submitted by him.

An account of the last minute attempt made by him to dissuade the House of Commons from passing the India Act of 1935 forms the theme of a whole chapter towards the very end of which the author quotes the one sentence pronounced by a individual destined later on to be his faithful follower and ally, Mr. Amery, which had the effect of utterly breaking the spell cast by the 55-minute oratorical tour-de-force of his future chief.

Failing to convince the Parliament that the grant of a further instalment of political power to India under the Act of 1935, was a mistake, Mr. Churchill devoted his energies and abilities to pointing out the dangers to world peace implied in the rise of Nazi Germany and Fascist Italy though there had been a time when he had not been above hobnobbing with the more prominent leaders of totalitarianism. But his was then a voice crying in the wilderness.

The outbreak of the Second World War found him a member of the inept and spineless Chamberlain Cabinet. Mr. Jog suggests that the unexpected stoppage of the efforts of Lord Linlithgow in the matter of pushing through the Federal part of the Act of 1935, may have been due to pressure exerted by Mr. Churchill, going so far as to say that " it is not at all improbable that he should have made its suspension a condition precedent of his joining the War Cabinet." With his appointment as Prime Minister, Mr. Churchill became Britain's war leader and glowing indeed are the tributes paid repeatedly to him by the author.

Mr. Jog, however, in proving his thesis does not fail to point out that the same Mr. Churchill who in the thirties had, day in and day out, spoken about India and against Indian nationalism, preserved unbroken silence in the first sixteen months of his premiership breaking it only once in September, 1941 when he " gave a categorical *No* in reply to the question whether the Atlantic Charter applied to India." The author, explains this taciturnity as being due to the fact that Mr. Amery had become his mouthpiece.

A critical estimate of the reasons which prompted the War Cabinet under the inspiration of Mr. Churchill to send out the Cripps proposals, the reasons why they were regarded as unacceptable by Indians and the extent of the success of this move from the British point of view are dealt with in considerable detail in the next two chapters (Chapters XIX and XX). In the chapter headed "His Finest Hour," Mr. Jog tells his readers how Mr. Churchill at last found an opportunity of demonstrating the correctness of his views on the Indian problem to his countrymen, at the same time proving out of his own mouth how complete had been the failure of the British administration in carrying

out the tasks it had set itself which, according to it, justify its presence in India.

In the last chapter, Mr. Churchill is painted as the champion of British imperialism and the reasons for it are explained. The book concludes with the following warning. "Let him (Mr. Churchill) beware....of upholding in the name of a benevolent Imperialism what he has so valiantly sought to destroy all these years—the spirit of Fascism." It is noteworthy that the English people aware of his hatred of any change threw him overboard as soon as his services had been utilised to the fullest possible extent as a war leader thus proving their political wisdom.

This provocative and, some would say, controversial book makes entertaining reading. Well documented throughout, it is only in two instances that the author has failed to offer evidence in support of his views and in both he has admitted that they are surmises based on the general attitude of Mr. Churchill towards the Indian problem. One is tempted to think that Mr. Jog has somehow caught his technique in the matter of selecting his words and shaping his sentences from the man one aspect of whose work as a British statesman he has submitted to a critical study. The somewhat too frequent use of certain quotations from Mr. Churchill's forthright utterances on Indian nationalism give rise to an eneasy feeling that the author has occasionally succumbed to the temptation of special pleading where it is needless. Nonetheless, it is an admirable book and the only one we know of where we get a treatment of this particular aspect of Mr. Churchill's career as a public man.

H. C. MOOKERJEE

**India's Destiny.**—By Ceril Modak, M.A. Published by Kitab-Mahal, Allahabad. Pp. 195. Price Rs. 3-8.

Dedicated to Pandit Jawaharlal Nehru who, if anybody in India, has always remained aloof from communalism, this book is an eloquent plea addressed to members of all communities in our motherland to set the interests of the country as a whole above those of the groups to which they belong. Though in the prefatory note the author has indirectly suggested that the divide and rule policy of Britain has encouraged separatist tendencies among India's nationals, he has failed to point out the extent to which we are also responsible for our disunity. The first three chapters deal with the religious tolerance of India, racial fusion as between the Hindu and the Muslim, religious synthesis, the inter-action between the two communities in such spheres as music, painting and architecture, etc. After this comes an attempt to show that disunity is the main cause of our poverty. The analysis of the communal problem as also the discussion on caste are noteworthy. It is probable that the outstanding contribution of Mr. Modak will be found in the last two chapters in which he points out the contributions which can be made to the solution of the communal problem by both the majority and the minority communities.

Mr. Modak's book is an eloquent plea addressed to all thinking Indians and though his is a long-term programme, there does not seem much doubt that it is the only satisfactory solution of what has today grown to be the most insistent of our problems.

M. B. B.

# Ourselves

## University and Police Firing at Calcutta

In a meeting of the Senate held on the 25th January last, the Vice-Chancellor condemned recent firing at the students by the Calcutta Police as unjustified and uncalled for. He also deprecated the intrusion of the police into the University compound on that occasion. He did not at the same time approve of the University grounds being utilised by the students for airing their political views.

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## New Honour to Professor S. K. Chatterji

Professor Suniti Kumar Chatterji was recently elected an Honorary Member of Societe Asiatique which is the premier Oriental society of France. Professor Chatterji's election was on the basis of his distinguished work in Oriental studies. We congratulate him on this new honour.

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## Professor Dudley Stamp at the University

Professor Dudley Stamp, D.Sc., who holds the Chair of Geography at the London School of Economics and Political Science and is adviser to His Majesty's Government on Town and County Planning, was recently invited by the University to delvier two popular lectures. On the 16th and 17th January last he delivered the lectures, the subjects being (*i*) The Place of Geography in University Education and (*ii*) The Role of Geography in National Planning. On the first day Dr B. C. Roy and on the second day Dr. B. C. Law presided.

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## Adharchandra Mookerjee Lecturer, 1946

Dr. Surendranath Sen, M.A., Ph.D., B.Litt. (Oxon.), has been appointted by the University Adharchandra Mookerjee Lecturer, 1946. Dr. Sen, it should be recalled, was Sir Asutosh Mookerjee Professor of Indian

History in this University and has been for the last few years the Director of Archives, Government of India.

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### Late Professor P. N. Ghosh

We regret to announce the death of Professor Phanindranath Ghosh of the Department of Applied Physics of this University. Professor Ghose had been connected with the University as the head of his Department since 1920 and apart from training successive batches of students in different aspects of Applied Physics, he contributed a good deal to the University's organisational work. As a Professor and as a Fellow of the University, he rendered very useful and valued service to it during a period extending over a quarter of a century. Post-Graduate Department, both on the Science and on the Arts side, suspended work for a day in his memory.

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### Our Vice-Chancellor at the Patna University

Mr. P. N. Bannerjee, M.A., B.L., Barrister-at-Law, Vice-Chancellor, Calcutta University, delivered an Address at the Annual Convocation of the Patna University.

# Official Notifications, University of Calcutta

## Orders by the Vice-Chancellor and Syndicate of the University of Calcutta

Notification No. Misc. R5

It is hereby notified for general information that the following changes in Chapter V of the Calcutta University Regulations relating to the establishment of a Board of Studies in Commerce has been sanctioned by Government :—

In Chapter V, the following new section *vi* ., Sec. 4A, be inserted after Section 4 (Page 23, Edition of 1945)—

4A. Notwithstanding anything contained herein before a Board of Studies in Commerce shall be composed of—

(*a*) Four members to be elected by the Faculty of Arts from among the members of the Faculty (including the Added Members).

(*b*) Three members to be elected by the Board of Higher Studies in Commerce from among the members of the Board.

(*c*) Five members to be nominated by the Syndicate. The members so nominated must be persons connected with Commerce or Commercial studies.

The Board thus constituted shall have power to co-opt not more than three additional members who must be teachers of or specialists in a subject or subjects with which the Board is concerned.

No member of the Board shall belong to more than five Boards.

Senate House,
*The 29th November*, 1946.

B. B. DUTT,
*Registrar (Offg.)*.

### THE REVISED SYLLABUS FOR M.A. EXAMINATION IN ENGLISH

The following revised syllabus for the M.A. Examination in English will come into operation from the M.A. Examination of 1949.

(1) The M.A. course in English shall be divided into two groups and eight papers.

(2) The first four papers of each group shall be identical and shall cover the following subjects :—

| | | |
|---|---|---|
| Paper I | .. Shakespeare .. .. .. .. | 100 marks |
| Paper II | .. English Literature (1516-1660) excluding Shakespeare | 100 marks |
| Paper III | .. English Literature (1660-1798) .. .. | 100 marks |
| Paper IV | .. English Literature (1798-1832) .. .. | 100 marks |

(3) The remaining four papers shall be taken from any of the following groups, but not from both :—

GROUP A

| | | |
|---|---|---|
| Paper V | .. English Literature (1832-1892) .. .. | 100 marks |
| Paper VI | .. English Literature (1892 to the present time) .. | 100 marks |
| Paper VII | .. (*a*) History of English Literature upto 1516 with selected Old and Middle English texts in Translation | 50 marks |
| | (*b*) Chaucer .. .. .. .. | 50 marks |
| Paper VIII | .. (*a*) English Literary Criticism with special texts .. | 50 marks |
| | *Or* | |
| | Historical English Grammar and Elements of English | 50 marks |
| | (*b*) An Essay on a subject connected with the course | 50 marks |

GROUP B

| | | |
|---|---|---|
| Paper V | .. (*a*) Selected Old English Prose texts .. .. | 50 marks |
| Questions shall also be set on the History of Old English Literature and Grammar. | | |
| | (*b*) Selected Old English Poetry texts .. .. | 50 marks |

| | | | |
|---|---|---|---|
| Paper VI | .. | (*a*) Selected Middle English texts (1100-1350) ... | 50 marks |
| | | (*b*) Selected Middle English texts (1350-1516), excluding Chaucer | 50 marks |

Questions shall also be set on the History of Middle English Literature and Grammar.

| | | | |
|---|---|---|---|
| Paper VII | .. | (*a*) Chaucer .. .. .. .. | 50 marks |
| | | (*b*) Growth of the English Language from the Old English period to modern times | 50 marks |
| Paper VIII | .. | (*a*) Origins of the English language .. .. | 50 marks |
| | | (*b*) Essay on a subject connected with the course .. | 50 marks |

(4) Each of the Papers I to IV as well as of Papers V and VI of Group A shall be divided into two halves.

(*a*) The first half shall cover the literary history of the relevant period and, in the case of Paper I, the more important types of Shakespeare criticism, the subject to be studied with reference to illustrative works which shall be specified from time to time. Candidates will be not expected to possess a detailed knowledge of these.

(*b*) The second half shall cover prescribed texts of which a detailed knowlege will be required.

(*c*) The course for Papers II to IV and Papers V and VI of Group A shall include standard works in prose, poetry and the drama.

(*d*) Questions on the texts prescribed under (*b*) shall include (*i*) Questions on the subject matter and (*ii*) Questions on the language of the texts.

(5) A candidate who has taken his B.A. degree with Honours in English may, subject to the conditions specified below, offer, in lieu of Examination in Paper VIII of either Group, a thesis on a topic connected with the course.:

(*a*) He must intimate to the Head of the Department of English by the 15th of January following his admission to the Post-Graduate class in English, that he proposes to offer a thesis in lieu of examination in Paper VIII. The Head shall assign him to a teacher of the Department under whom the candidate shall prepare a bibliography and a statement indicating, with reference to it, the scope of original research on the topic selected.

(*b*) He shall, not later than the 15th of July next, submit to the Secretary to the Council of Post-Graduate Teaching in Arts the bibliography and the statement along with an application for permission to offer a thesis in lieu of examination in Paper VIII.

(*c*) The Board of Higher Studies in English shall forthwith appoint a Committee to scrutinise the bibliography and the statement and to prepare a written report. The Committee may ask the candidate to appear before it for interview.

(*d*) The report shall state if there is any scope for iorginal work on the topic as claimed by the candidate and, if necessary, shall suggest alterations in the line of in estimation proposed to be followed.

(*e*) The Board shall consider the report before disposing of the application. If the application is granted, the thesis shall be prepared under the supervision of the teacher to whom the candidate had been assigned.

(*f*) The candidate shall deliver three copies of the thesis (printed or typewritten) to the Secretary to the Council of Post-Graduate Teaching in Arts at least a fortnight before the first day of the M.A. Examination at which intends to appear.

(*g*) The thesis shall be examined by a Board of three Examiners, and the maximum number of marks assigned shall be or hundred. The Examiners may, in their discretion, subject the candidate to an oral Examination with reference to the thesis.

(*h*) The name of every candidate who possess the M.A. Examination with a thesis shall be marked with an ascertaining the list of successful candidates published in the Gazette an also in the University Calender.

(Passed by the Ex. Com. dated the 8th February, 1946, and confirmed by the Senate dated the 4th May, 1946.

Notification No. Misc. R6

It is hereby notified for general information that the following changes in (1) Chapters XXXIV and (2) XXXVIII of the Calcutta University Regulations and (3) the insertion of a new Chapter, *vi* ., Chapter XXXIII-A (D.Phil.) relating to the provision of an Intermediate Research Degree (D.Phil.) in Arts and Science after Chapter XXXIII of the Regulations have been sanctioned by Government :—

(1) Chapter XXXIV (Doctor of Philosophy—Ph.D.) :—

(*i*) The heading ' Doctor of Philosophy ' be replaced by " Doctor of Literature."

(*ii*) The words " Doctor of Philosophy " be replaced by the word " Doctor of Literature " in the following sections :—

Section 1 (lines 2 and 3)
Section 7 (lines 11 and 12)
Section 8 (Para 2, lines 11 and 12)
Section 11 (line 4)

The figure " 200 " in Section 5 be replaced by the figure " 300."

(2) Chapter XXXVIII (Doctor of Science—D.Sc.) :—

The figure " 200 " in Section 5 be replaced by the figure " 300."

(*iii*) Chapter XXXIII-A.

## DOCTOR OF PHILOSOPHY IN ARTS AND SCIENCE (D.PHIL.)

1. Any Master of Arts or Science of the University of Calcutta, or subject to the sanction of the Syndicate) any Master of Arts or Science of any other University recognised by this University for this purpose, may apply to the Registrar for registration for the D.Phil. Degree in the subject within the purview of the Regulations in which he has obtained the Degree of Master of Arts or Science, as the case may be, or in an allied subject.

2. The applicant shall state in the application for registration his qualifications and indicate the subject which he proposes to investigate. The application must be supported by a certificate in a form to be prescribed by the Syndicate from a teacher recognised by the University for this purpose, under whose guidance he intends to carry out the work. The Syndicate may exempt a candidate from production of the certificate in special cases.

3. Every application shall be placed before a D.Phil. Degree Committee consisting of the Vice-Chancellor, the President of the Post-Graduate Council in Arts or Science, as the case may be, the Dean of the Faculty concerned, Head of the Department in the particular subject, and two experts in the subject to be appointed by the Syndicate in consultation with the relevant Executive Committee. The Syndicate will grant the application for registration for the D.Phil. Degree after considering the recommendation of the said D.Phil. Degree Committee.

4. On his application being granted by the Syndicate the applicant shall be registered and shall work for two years under a teacher recognised by the University for the purpose and prepare a thesis for the Degree. He may, not later than one year after his registration, be permitted to change the subject or scope of his research with the approval of the D.Phil. Degree Committee.

5. The candidate for the D.Phil. Degree shall submit three type-written or printed copies of his thesis embodying the results of research and affording evidence of originality shown by him by the discovery of new facts or by a critical survey of facts or relations between facts discovered by others.

The candidate must produce along with the thesis a certificate from the teacher under whom he has worked, stating that he has fulfilled the requirements of the Regulations relating to the nature and prescribed period of research work.

Notwithstanding anything contained above, the Syndicate may, in special cases, after considering the recommendation of the D.Phil. Degree Committee, permit a candidate for the D.Phil. Degree to submit a thesis prepared independently of a teacher, arovided that the candidate concerned has carried on research work for a period of at least two years after he has passed the M.A. or M.Sc. Examination.

6. The candidate may also submit in support of his thesis the contents of any work he may have previously published but he shall not submit as his thesis any work for which a Degree of Distinction has been conferred on him in this or any other University. He will not, however, be precluded from incorporating any such work in a thesis covering a wider field, provided he indicates in a written statement the work so incorporated.

7. Every candidate shall forward with his thesis a fee of Rs. 200. No candidate who fails to pass or present himself for examination shall be entitled to claim a refund of his fee.

8. After considering the recommendation of the D.Phil. Degree Committee, the Syndicate shall refer the thesis to a Board of three examiners including the teacher, if any, under whom the candidate has worked.

If the thesis is approved by the Board of Examiners, they will furnish the Syndicate with a report indicating in what respects the thesis affords evidence of originality.

9. After the thesis has been approved by the Board of Examiners, the candidate shall be asked to appear at an oral examination, and also in the case of a Science subject at an oral or a practical examination or both, in respect of the subject of his thesis to be held by at least two examiners of whom the teacher, if any, under whom he worked will ordinarily be one. *z*

The examiners may also ask question beyond the subject of the thesis in order to satisfy themselves that the candidate has adequate knowledge of the particular branch of Arts or Science on which he has submitted his thesis.

10. If the examiners are satisfied with the oral or/and practical examination, they shall submit a report to the Syndicate approving the work of the candidate.

If the candidate fails to satisfy the examiners at the oral or/and practical examination, the Syndicate may, on the recommendation of the examiners, permit him to appear again at the oral or/and practical examination after six months but within a period not exceeding one year following the date of his failure. The fee on re-entry shall be half the fee originally paid.

11. If the Syndicate, after considering the report of the examiners, are satisfied that the candidate is worthy of the Degree of D.Phil., they shall cause his name to be published with the title of the subject of his thesis.

12. A Diploma under the seal of the University and signed by the Vice-Chancellor will be given to each successful candidate at the next Convocation held for conferring Degrees.

13. Notwithstanding anything contained in the above regulations, if the thesis of a candidate, originally presented for admission the D.Litt. or D.Sc. Degree under the provisions of Chapter XXXIV and XXXVIII respectively, is not recommended by the Board of Examiners concerned but is on the other hand adjudged by them to be of sufficient merit to justify

his admission to the D.Phil. Degree, the thesis shall, if the candidate so elects, be deemed to be a thesis presented and approved for the D.Phil. Degree for the purposes of Sections 8 and 9 above. Such a candidate shall, unless specially exempted by the Syndicate on the recommendation of the Board of Examiners, be asked to appear at an oral or/and practical examination, as the case may be, to be conducted by a Board of Examiners to be specially constituted by the Syndicate for the purpose. The examiners may ask questions beyond the range of the subject of his thesis.

The provisions of Sections 10, 11 and 12 will apply to these candidates.

*N.B.*—The above changes will be given effect to from 1st April, 1947.

*Senate House,*
*The 28th November,* 1946.

B. B. DUTT,
*Registrar (Offg.).*

Notification No. T. 743

It is hereby notified for general information that the following reduced course has been prescribed in English, Bengali (Vernacular), Sanskrit (Second Language) and Pali (Second Language) for the Matriculation Examination 1947 and 1948.

## MATRICULATION EXAMINATION, 1947

### Major Vernacular

### BENGALI

TEXT-BOOKS

Matriculation Bengali Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

Chattopadhyay, Sanjibchandra. Palamau.
Chattopadhyay, Bankimchandra. (*a*) Bangala Bhasha ; (*b*) Sagar Sangame Nabakumar.
Sastri, Sibnath. Bankimchandra.
Basu, Jogindranath. Madhusudaner Balyakal.
Pal, Bepinchandra. Sir Asutosh.
Tagore, Rabindranath. Khokababur Pratyabartan.
Vivekananda, Swami. Suez Khale.
Trivedi, Ramendrasundar. Niyamer Rajatya.
Bandyopadhyay, Panchkari. Bangalir Bisishtata.
Chattopadhyay, Saratchandra. Samudra Bakshe Saiklon.
Mukhopadhyay, Prabhatkumar. Mashtar Masay.
Haque, Kazi Imdadul. Alhamra.
*Either,* Datta, Akshaykumar. Swapna Darsan (Vidyasagar).
*Or,* Datta Aswinikumar. Lokabhay.
*Either,* Basu, Jagadischandra. Bhagirathir Utsa Sandhane.
*Or,* Vidyabinode, Kshirodprasad. Pratapaditya.
*Either,* Bandyopadhyay, Rakhaldas. Pashaner Katha.
*Or,* (*a*) Debi, Anurupa. Deser-seba. (*b*) Bandyopadhyay, Bibhutibhushan. Apur Pathsala.

*Poetry*

Jadavendra. Matrisneha.
Gupta, Iswarchandra. Matribhumi-o-Matribhasha.
Datta, Michael Madhusudan. Meghnad-o-Bibhishan.
Bandyopadhyay, Rangalal. Desaprem.
Chakrabarti, Biharilal. Balmikir Kabitvalabh.
Ghosh, Girischandra. Lakshman Barjan.
Sen, Nabinchandra. Birer Sok.
Bhattacharyya, Nabakrishna. Sesh.
Devi, Girindramohini. Ma-o-Chhele.
Tagore, Rabindranath. (*a*) Pujarini ; (*b*) Bharat Tirtha.
Majumdar, Bijaychandra. Himachale.
Sen, Rajanikanta. Ma.
Ray, Kamini. Asar Swapan.
Datta, Satyendranath. Amra.
Kabir, Humayun. Akbar.

Books prescribed for Rapid Reading :—

(1) Ray, Nikhilnath. Murshidabad Kahini (abridged edition, published by the Calcutta University).

(2) *Any one* of the following :—

Tagore, Rabindranath. Galpaguchchha (Matric. Edn. published by the Visvabharati. Price Re. 1). Pieces to be read :—

Dena Paona. Post Master. Ginni. Byabadhan. Muktir Upay. Jibita-o-Mrita. Swarnamriga. Kabuliwala. Dan Pratidan. Jajneshwarer Jajna.
Chattopadhyay, Saratchandra. Bindur Chhele.
Sen, Dineschandra. Puratani.
Haque, Mozammal. Tapas Kahini.
Gupta, Jogendranath. Himalay-Abhijan.
Banerjee, Indubhushan and Banerjee, Anilchandra. Jagater Dharma Guru.
Karim, Rezaul. Turki Bir Kamal Pasha.
Ali, S. Wajed. Bhabishayter Bangali.
Bhattacharyya, Bijanbehari. Prabhat Rabi.
Bhattacharyya, Upendranath. Banger Bir Santan.
Gupta, Rajanikanta. Pratibha.

## ENGLISH

### TEXT-BOOKS

*Prose*

Select Readings from English Prose (latest edition, published by the Calcutta University). Pieces to be read :—

Ould, Herman. The Discovery.
Carrol, Lewis. The White Knight.
Doyal, Conan. The Lord of Chateu Noir,
Cowper, William Letter to the Rev. William Unwin.
*Either*, Mee, A. The Joan of Domremy.
*Or*, (*a*) Giekie. The Inside of the Earth. (*b*) Lawrence Binyon. Akbar.
David Copperfield (Published by the Calcutta University).

*Poetry*

Lahiri's Select Poems (latest edition, published by the Calcutta University). Pieces to be read :—

Herrick. To Daffodils.
Hubert. The Gifts of God.
Cowper. The Poplar Field.
Blake. Laughing Song.
Wordsworth. Lucy.
Shelley. Autumn.
Keats. Feary Song.
Tennyson. Home They Brought Her Warrier Dead.
Wolfe. The Burial of Sir John Moore.
Holmes. Contentment.
Davies. Leisure.
Hodgson. "Time You Old Gipsy Man."
Middleton. The Carol of the Poor Children.
Mrs. Naidu. Cradle Song.
Owen. Send Off.
*Either*, Gibson. The Light House.

*Or*,

(*a*) Saxe. My Familiar.
(*b*) Southey. The Inchcape Rock.
(*c*) Mare, Walter' de la. Off the Ground.

Books prescribed for Rapid Reading :—

*Any one* of the following :—

Oriental Tales (published by the Calcutta University).
Sister Nivedita. A Selection from Cradle Tales of Hinduism (Longmans, Green & Co.).
Bellis, H. Paths of Peace, Book IV (Oxford University Press, Indian edition).
Masani, Minoo. Our India (Oxford University Press).
Hedin, Sven. The Forbidden Land (Macmillan & Co.).
Parkhurst, C. A. Wonders of the Past and Present (Macmillan & Co.).
Hill, J. C. Introduction to Citizenship (Oxford University Press).

**Classical Languages**

SANSKRIT

TEXT-BOOKS

Matriculation Sanskrit Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

(1) *Panchatantaram*—(*a*) Panchatantra-Katha-Mukham, (*b*) Sinha-Srigalsishu-Katha, (*c*) Sresthi-Kshapanaka-Napita-Katha, (*d*) Atilobhi-Brahmana-Putranam Parinamah, (*e*) Pandita-Murkhanam-Katha, (*f*) Chitranga-Sarameya-Katha.

(2) *Hitopadesah*—(*a*) Kankanalubdha-Pantha-Katha, (*b*) Prabhoradarah, (*c*) Buddhi-balam, (*d*) Mandavisha-Sarpa-Katha, (*e*) Gunasya Doshatvam, (*f*) Avivekasya Parinamah, (*g*) Ajnata Kulasilo Bandhuh, (*h*) Viravaropakhyanam.

(3) *Vetalapancavimsatih*—Vikramarka-Vetalayoh.

(4) *Bishnupuranam*—Sagaravamsakhyanam.

*Poetry*

*Either*, (1) *Ramayena*—Lakshman Varjanam.

*Or*, *Mahabharatam*—Jatugrihadahah.

(2) Mahabharatam—Vidhurasaya Dhritarastra Prati Nitikatha.

Grammar—

Sanskrita Vyakarana Pravesika (latest edition, published by the Calcutta University).

*Either*, How Buddha consoled Kisagotami. *Or*, Death of King Pasenadi. *Either*, Mohabodhi Puja. *Or*, Conversion of Asoka. Buddha's Parables. *Either*, The Mistress and the Maid Servant. *Or*, The Cowherd and the Cattle.

*Poetry*

(*a*) *Khuddakapatha*—*Either* Mangalam *or* the Nidhi.

(*b*) *Dhammapada*—Sanatana-Dhamma. Appamada. *Either* Puppha *or* Tanha. Buddha's Udana. *Either* Budddhana Sasanam *or* Buddha's Exhortation.

(*c*) Other Texts—The Chronicle of Gotama Buddha. *Either* Bhaddekaratta *or* Vidhurovada.

Grammar recommended—

Balavatara (latest edition, published by the Calcutta University). The Sutras on Samasa, Karaka and Vibhakti only.

**MATRICULATION EXAMINATION, 1948**

MAJOR VERNACULAR

TEXT-BOOKS

Matriculation Bengali Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

Chattopadhyay, Sanjibchandra. Palamau.
Chattopadhyay, Bankimchandra. Bangala Bhasha.
Basu, Jogindranath. Madhusudaner Balyakal.
Pal, Bepinchandra. Sir Asutosh.
Tagore, Rabindranath. Khokabebur Pratyabartan.
Swami Vivekananda. Suez Khale.
Trivedi, Ramendrasundar. Niyamer Rajatya.
Bandyopadhyay, Panchkari. Bangalir Bisishtata.
Chaudhuri, Pramathanath. Mantra Sakti.
Thakur, Balendranath. Janmabhumi.
Chattopadhyay, Saratchandra. Mejdidi.
Haque, Kazi Imdadul. Alhamra.
*Either*, Datta, Akshaykumar. Swapna Darsan.
*Or*, Datta, Rameschandra. Dillinagari and (*b*) Datta, Aswinikumar. Lokabhay.
*Either*, Basu, Jagadischandra. Bhagirathir Utsa Sandhane.
*Or*, Vidyavinode, Kshirodprasad. Pratapaditya.
*Either*, Bandyopadhyay, Rakhaldas. Pashaner Katha.
*Or*, (*a*) Debi, Anurupa. Deser Seva and (*b*) Bandyopadhyay, Bibhutibhushan. Apur Pathsala.

*Poetry*

Jadavendra. Matrisneha.
Chakrabarti, Mukundaram. Kalketu.
Gupta, Iswarchandra. Matribhumi-o-Matribhasha.
Datta, Michael Madhusudan. Meghnad-o-Bibhishan.
Chakrabarti, Biharilal. Balmikir Kabityalabh.
Bandyopadhyay, Hemchandra. Parasmani.
Sen, Nabinchandra. Birer Sok.

Bhattacharyya, Nabakrishna. Sesh.
Dasi, Girindramohini. Ma-o-Chhele.
Tagore, Rabindranath. (*a*) Pujarini, (*b*) Bharat Tirtha.
Majumdar, Bijaychandra. Himachale.
Sen, Rajanikanta. Ma.
Debi, Priyambada. Kalbaisakhi.
Dutta, Satyendranath. Amra.
Ray, Kalidas. Chhatra Dhara.
Kabir, Humayun. Akbar.

Books prescribed for Rapid Reading :—

*Any two* of the following :—

Ray, Nikhilnath. Murshidabad Kahini (abridged edition, published by the Calcutta University).

Tagore, Rabindranath. Galpaguchchha, Part I (shortened edition, published by the Viswa Bharati). Pieces to be read :—

Dena Paona. Post Master. Ginni. Ramkanayer Nirbuddhita. Samaptti. Samarpan. Byabadhan. Muktir Upay. Svarnamriga. Kabuliwala. Chhuti.

Sen, Dineschandra. Behula.
Debi, Ratnamala. Himalayar Paribhraman.
Banerjee, Indubhushan and Banerjee, Anilchandra. Jagater Dharma Guru.
Karim, Rezaul. Dara Shikoh.
Ali, S. Wajed. Bhabishyater Bangali.
Bhattacharyya, Bijanbehari. Prabhat Rabi.
Bhattacharyya, Upendranath. Banger Bir Santan.
Gupta, Rajanikanta. Pratibha.
Datta, Nalini. Bharater Parichaya.

## ENGLISH

### Text-books

#### *Prose*

Select Readings from English Prose (latest edition, published by the Calcutta University). Pieces to be read :—

Giekie. The Inside of the Earth.
Conan Doyle. The Lord of Chateau Noir.
Hermon Ould. The Discovery.
*Either*, Mee, A. Joan of Domremy.
*Or*, (*a*) Sister Nivedita. The Judgment Seat of Vikramaditya and (*b*) Binyon, A. Akbar.
David Copperfield (published by the Calcutta University).

#### *Poetry*

Lahiri's Select Poems (latest edition, published by the Calcutta University). Pieces to be read :—

Herrick. To Daffodils.
Herbert. The Gifts of God.
Cowper. (*a*) The Poplar-Field ; (*b*) Alexander Selkirk.
Blake. Laughing Song.
Wordsworth. Lucy.
Keats. Feary Song.
Tennyson. 'Home They Brought Her Warrior Dead.'
Wolfe. The Burial of Sir John Moore.
Davies. Leisure.
Hodgson. 'Time You Old Gipsy Man.'
Mrs. Naidu. Cradle Song.
Middleton. The Carol of the Poor Children.
Owen. Send Off.
*Either*, Gibson. The Light House.
*Or*, (*a*) Southey. The Inchcape Rock.
(*b*) Saxe. My Familiar.
(*c*) De La Mere. Off The Ground.

Books prescribed for Rapid Reading :—

*Any one* of the following :—

Oriental Tales (published by the Calcutta University).
Sister Nivedita. A Selection from Cradle Tales of Hinduism (Longmans, Green & Co.).
Bellis, R. Paths of Peace, Book IV (Oxford University Press, Indian edition).
Masani, Minoo. Our India (Oxford University Press).
Parkhurst, C. A. Wonders of the Past and Present (Macmillan & Co.).
Hill, J. C. Introduction to Citizenship (Oxford University Press).

**Classical Language**

SANSKRIT

TEXT-BOOKS

Matriculation Sanskrit Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

(1) *Panchatantram*—(*a*) Panchatantrakathamukham. (*b*) Pandita-Murkhanam Katha, (*c*) Shresti-Napita-Kshapanaka Katha. (*d*) Mohachaturaka Srigala Katha. (*e*) Chitranga-Sarameyashya Katha. (*f*) Haridatta-Kshetrapala-Sarpa-Katha. (*g*) Asambhaya-Chinta-parinamah.

(2) *Hitopodesh*—(*a*) Gunashyadashottam. (*b*) Mandabisha-Sarpa-Katha. (*c*) Ajnata-kulasilo Bandhu. (*d*) Mahatan Byupadesana. (*e*) Birabaropakhanam.

(3) *Vetalpanchavinsatih*—Bikramarka-Betalayoh.

(4) *Vishnupuranam*—Sagorobansapakhyanam.

*Poetry*

*Either*, (1) *Ramayanam*—Andhamuni Putra Badhah.

*Or*, *Mahabharatam*—Jaturgrihadahah.

(2) Mohabharatam—Bidurasya Dhritarastram Prati Nitikatha.

Grammar—

Sanskrita Vyakarana Pravesika (latest edition, published by the Calcutta University).

PALI

TEXT-BOOKS

Matriculation Pali Selections (latest edition, published by the Calcutta University). Piece to be read :—

*Prose*

Mulapariya Jataka. Baveru Jataka. Nakkhatta Jataka. Nigrodhamiga Jataka. Rajovoda Jataka. Mahamangala. Description of an Earthquake. Buddha's Visit to Kapilavatthu. *Either*, Why Devadutta rebelled against Buddha, *or* Ajatasuttu and Buddha. *Either*, How Buddha consoled Kisagotami, *or* Quarrel between the Sakiyas and the Koliyas. Buddha's Parables :—*Either* The Mistress and the Maid Servant *or* the Cowherd and the Cattle.

*Poetry*

(1) *Khuddakapatha*—*Either* Mangalam, *or* Petadakkhina.

(2) *Dhammapada*—Sanatana Dhamma. *Either* Appamada, *or* Citte. *Either* Bhikkhu, *or* Brahmana. Buddha's Udana. *Either* Buddhana Sasanam, *or* Buddha's Exhortation.

(3) Other Texts—The Chronicle of Gotama Buddha. *Either* Bhaddekaratta, *or* Silanisamsa.

Grammars recommended—

Balavatara (latest edition, published by the Calcutta University). The Sutras on Samasa, Karaka and Vibhaktionly.

Chakrabarti, Nilmani and Ghosh, Mahendrakumar. Pali Grammar (the whole).

SENATE HOUSE,
*The 25th November*, 1946.

B. B. DUTT,
*Registrar* (*Offg.*).

Notification No. T.744

It is hereby notified for general information that the following reduced course has been prescribed in English, Vernacular (Bengali), Sanskrit (Second Language), Pali (Second Language) and Alternative Vernacular Language (Bengali) for the Intermediate Examination, 1947 and 1948.

**I.A. AND I.Sc. EXAMINATIONS, 1947**

ENGLISH

TEXT-BOOKS

*Poetry*

Intermediate Poetical Selections (latest edition, published by the Calcutta University). Pieces to be read :—

Shakespeare. The Merchant of Venice, Act IV, Sc. 1.

Milton. On His Blindness.

Wordsworth. Yarrow Visited; Yarrow Unvisited.

Byron. The Ocean.

Shelley. To Night.

Keats, John. Ode to Autumn.

Tennyson. Morte D'Arthur; Sir Galahad.

Browning, Robert. The Patriot.
Bridges, Robert. London Snow.
Kipling, Rudyard. "Cities and Thrones and Powers."
Mare, Walter de la. "All That's Past."
Brooke, Rupert. "These Hearts were Woven of Human Joys and Cares."
Owen. Anthem for Doomed Youth.
*Either*, Coleridge. The Rime of the Ancient Mariner.
*Or*, Milton. (*a*) L'Allegro and (*b*) Il Penseroso.

*Prose*

Intermediate Prose Selections (latest edition, published by the Calcutta University). Pieces to be read :—
Jeans, Sir James. The Dying Sun.
Lawrence, D. H. The Rocking Horse Winner.
Woolf, Virginia. Dorothy Wordsworth.
*Either*, Newman, J. H. The Northmen.
*Or*, Thackeray. George III.

Intermediate Bible Selections (published by the Calcutta University). Pieces to be read :—
Genesis. The Story of Cain and Abel.
Exodus. Mount Sinai and the Ten Commandments.
Judges. The Story of Gideon.
The First Book of Samuel. The Whole.
The Book of Daniel. Belshazzar's Feast.
The Gospel according to St. Mathew—
(*a*) The Visit of the Wise Men from the East.
(*b*) The Massacre of the Innocents.
(*c*) John the Baptist and the Baptism of Jesus.
(*d*) The Temptation of Jesus.
(*e*) The Sermon on the Mount.
(*f*) The Feast at Levi's House.
(*g*) The Parable of the Sower.
(*h*) A Group of Parables.

Select Short Stories (published by the Calcutta University). Pieces to be read :—
H. G. Wells. The Star.
G. Gissing. The Christopherson.
*Either*, Howthorne. Old Ester Dudley.
*Or*, Bret Harte. The Post Mistress of Laurel Run.
Drinkwater, J. Abraham Lincoln (Longmans, Green & Co.).

Candidates for the Intermediate Examination in English are expected to possess only a knowledge and understanding of the prescribed pieces (both Prose and Poetry); questions will not be set to test their knowledge of the lives, works and styles of the authors beyond what is involved in the set pieces themselves.

## VERNACULARS

### Bengali

#### Text-books

Intermediate Bengali Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

Chattopadhyay Bankimchandra. (*a*) Biral; (*b*) Bahubal-o-Bakyabal.
Tagore, Rabindranath. (*a*) Sahityer Samagri; (*b*) Maryada.
Maitreya, Akshaykumar. Sakaler Sukh-Dukhha.
Trivedi, Ramendrasundar. Mahakabya.
Tagore, Balendranath. Subha Utsab.
Chattopadhyay, Saratchandra. Andharer Rup.
Mitra, Khagendranath. Acharyya Ramendrasundar.
Muhammad Barkatullah. Kabi Hafez.
*Either*, Dutta, Akshaykumar. Mitrata.
*Or*, (*a*) Ghosh, Kaliprasanna. Asru.
(*b*) Ghosh, Girischandra. Vivekananda.
(*c*) Swami Vivekananda. Swades Mantra and
(*d*) Ghosh, Arabinda. Kshamar Adarsha.
*Either*, Datta, Rameschandra. Haldighater Juddha.
*Or*, Pal, Bepinchandra. Banga-Darsan-o-Bankimchandra.
*Either*, Mukhopadhyay, Rajkrishna. Sabhyata.
*Or*, Mukhopadhyay, Asutosh. Jatiya Sahitya.

*Poetry*

Bidyapati. Atma Samarpan.
Datta, Madhusudan. Bangabhasha.
Chakrabarti, Biharilal. Himalay.

Sen, Nabinchandra. Naridharma.
Tagore, Rabindranath. (*a*) Bhasha-o-Chhanda; (*b*) Sadhana; (*c*) Sankha.
Baral, Akshaykumar. Menab Bandana.
Roy, Dwijendralal. Mebar Patan.
Das, Chittaranjan. Sagar Samgit.
Nazrul Islam. Daridrya.
Humayun Kabir. Janma.
*Either*, (*a*) Datta, Madhusudan. Niladwajer Prati Jana.
(*b*) Bandyopadhyay, Hemchandra. Sati Sunya Kailas.
*Or*, (*a*) Das, Kasiram. Samudra Manthane Sib.
(*b*) Ghosh, Girischandra. Juraite Chai.
(*c*) Sen, Rajanikanta. Setha Ami Ki Gahiba Gan.
*Either*, Begchi, Jatindramohan. Sabarir Pratiksha.
*Or*, Datta, Satyendranath. Sindhu Tandab.

## SECOND LANGUAGES

### SANSKRIT

#### TEXT-BOOKS

*Prose*

Intermediate Sanskrit Selections (latest edition, published by the Calcutta University) Pieces to be read :—
Sibicharitam.
Ravana-Bibhishana Sambadah.
Niyateh Prabhutwam.
Kavyapurushotpattih.
Rajabahanacharitam.
Kadamberibilapah.
Damayantikatha.

*Poetry*

Raghuvamsam, *either* Canto V *or* VI.
Gita, Chapter X.
Bhattikavyam, Canto II.
Grammar recommended—
Bandyopadhyay, Devendrakumar. Panini-Pravesha-Vyakaranam.
*Note*—A fuller knowledge of the elements of Sanskrit Grammar than at the Matriculation Examination will be required.

### PALI

#### TEXT-BOOKS

Intermediate Pali Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

From Devata Ayacana to Dedication of Jetavana and the following pieces :—
*Either*, Buddha and Bahiya, *or* Schism at Kosambi, *or* Buddha on the Welfare of the Vijjis. *Either*, Nibbana, *or* Jacandhanam Hatthidassanam. *Either*, Importance of Sil *or* Notion of Puggala.

*Poetry*

Padhana Sutta. Dhaniya Sutta. *Either* Gathas of Talaputa, *or* the Gathas of Punnik *Either* Dutiya Dhammasangiti, *or* Despatch of Missionaries.
Grammars recommended—
Balavatara (published by the Calcutta University).
*One* of the following :—
Chakrabarti, Nilmani and Ghosh, Mahendrakumar. Pali Grammar.
Sastri, Vidhusekhar. Pali Prakas.

*Special Paper in Pali in lieu of a Paper in Vernacular*

#### TEXT-BOOKS

Intermediate Pali Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

The first twelve pieces from Devata Ayacana to Dedication of Jetavana.

*Poetry*

Rejoicings at Siddhattha's Birth.
*Either*, Dhariya Sutta *or* Downfall of the Brahmins.
*Either*, Gathas of Silava *or* the Gathas of Mahapajapati Gotami.
Grammars recommended—
Balavatara (published by the Calcutta University).

*One* of the following :—

Chakrabarti, Nilmani and Ghosh, Mahendrakumar. Pali Grammar.
Sastri, Vidhusekhar. Peli Prakes.

BENGALI

TEXT-BOOKS

*Prose*

Chattopadhyay, Bankimchandra. Kamalakanter Daptar. Pieces to be read :—
Basanter Kokil ; Phuler Bibaha ; Biral ; Dhenki.
Tagore, Rabindranath. Sankalan. Pieces to be read :—
Sikshar Milan ; Purba-o-Paschim ; Sarat ; Banshi ; Sandhya-o-Prabhat.
Chattopadhyay, Saratchandra. Mejadidi.

*Poetry*

*Either*, Datta, Madhusudan. Chaturdaspadi Kabitabali. Pieces to be read :—
Kasiram Das, Krittibas, Kalidas, Jasher Mandir, Sripanchami, Pran, Aswin Mas, Karun Ras, Bir Ras, Raudra Ras, Iswarchandra Vidyasagar, Valmiki, Mitrakshar.
*Or*, Chakrabarti, Biharilal. Kabyasangraha (published by the Calcutta University). Pieces to be read :—
(*a*) Saradamangal, Canto II ; (*b*) Sadher Asan, Canto I.
Bandyopadhyay, Hemchandra. Britra-Samhar, Cantos I-IX.
Majumdar, Mohitlal. Kavya Manjusha. Pieces to be read :—
Syamsundar, Siber Dakshalaya Jatra, Matri-Mangal, Bankim-Biday, Prarthana (Rabindranath Tagore), Chashar Ghare, Charbak-o-Manjubhasha, Siulir Biye, Bangla Ma.
Grammar recommended—
*One* of the following :—
Chattopadhyay, Sunitikumar. Bhashaprakas Bangala Byakaran (latest edition, published by the Calcutta University). Portions printed in small types are omitted.
Vidyabhushan, Nakuleswar. Bhashabodh Bangala Byakaran.

SENATE HOUSE,
*The 25th November*, 1946.

B. B. DUTT,
*Registrar* (*Offg.*).

Notification No. T.745

**B.A. EXAMINATION, 1947**

URDU (VERNACULAR)

It is hereby notified for general information, that " Chand Ham-Asr by Dr. Abdul Huq " has been prescribed as alternative to " Nuquashi Sulaymani" (Edn., 1939), pages 1-99, in Urdu Vernacular for the B.A. Examination, 1947.

SENATE HOUSE,
*The 26th November*, 1946.

B. B. DUTT,
*Registrar* (*Offg.*).

Notification No. T.747

**B.A. EXAMINATION, 1947 & 1948**

It is hereby notified for general information that the following reduced course had been prescribed in English, Vernacular (Bengali), Second Language, Sanskrit and Pali and Bengali (Vernacular—Pass & Honours) for the B.A. Examination, 1947 and 1948.

TEXT-BOOKS

**B.A. AND B.Sc. EXAMINATIONS, 1947**

ENGLISH

(*Pass Course*)

Shakespeare. Macbeth.
Shakespeare. The Merchant of Venice.
Young, C. B. (selected and edited by). Great English Poems (Oxford University Press).
Poems to be read. From Milton to Browning with the exxception of Dryden and Pope ; The Poems of Shelly are to be read as alternative to those of Keats and the Poems of Tennyson as alternative to those of Browning.
*Any two* of the following :—
Hardy, Thomas. The Mayor of Casterbridge.
Bailey. Dr. Johnson and his Circle.
A Book of Essays (published by the Calcutta University).

Pieces to be read :—
Hazlitt. My First Acquaintance with Poets.
Asquith. Biography.
Lowes. The Noblest Monument of English Prose.
Virginia Wolf. How it Strikes a Contemporary.
Huxley. Wordsworth in the Tropics.

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

Shakespeare. Tempest.
Milton. Samson Agonistes.
Golden Treasury, Book V (edited by Binyon).
Only the poems of the following author's are to be read :—
M. Arnold, R. Bridges, R. Brooke, G. B. Browning, T. Hardy, G. M. Hopkin, R. Kipling, G. Meredith, W. Owen, C. G. Rossetti, D. G. Rossetti, A. C. Swinburne, Lord Tennyson and W. B. Yeats.
Peter. Appreciations. The following pieces only :—
Style, Wordsworth, Charles Lamb, Love's Labour Lost, Measure for Measure, Shakespeare's English Kings and D. G. Rossetti *or* Coleridge.
The following books are prescribed as text-books for studying the Philology of the English Language and the History of English Literature :—
Jesperson, Otto. Growth and Structure of the English Language (Blackwell).
Legouis, E. A Short History of English Literature (Clarendon Press, Oxford).
*Any two* of the following author's are to be specially studied in connection with the History of Literature.
1. Spenser. 2. Pope. 3. Tennyson. 4. Donne.

## VERNACULARS

### Bengali

### Text-books

Chattopadhyay, Bankimchandra. Kapalkundala.
*Either*, Datta, Madhusudan. Meghnad Badh Kavya, Canto VII.
*Or*, Tagore, Rabindranath. Chitra. Pieces to be read :—
(*a*) Chitra, (*b*) Antaryami, (*c*) Sadhana, (*d*) 1400 Sal.
*Either*, Mukhopadhyay, Sir Asutosh. Jatiya Sahitya.
Pieces to be read :—
(*a*) Mahakabi Michael Madhusudan Dutta, (*b*) Bange Sahityer Bhabisyat.
*Or*, Ray, Amarendranath (compiled by). Samalochana Sangraha (latest edition, published by the Calcutta University). Pieces to be read :—
Chattopadhyay, Bankimchandra. Dinabandhu Mitra.
Sarkar, Akshaychandra. Jaydeb.
Tagore, Rabindranath. Sahitya Samalochana.
Basu, Jitendralal. Adhunik Banga Sahitye Ma.'
Basu, Purnachandra. Ramprasad.
The following books are recommended as showing the standard up to which candidates will be expected to have read :—
Nyayaratna, Ramgati. Bangla Bhasha-o-Sahitya Bishayak Prastab (4th edition, edited by Girindranath Bandyopadhyay).
Sastri, Sivanath. Ramtanu Lahiri-o-Tatkalin Banga-samaj.
Tagore, Rabindranath. Jibansmriti.
Mukhopadhyay, Bhudeb. Vividha Prabandha, Part II.
Trivedi, Ramendrasundar. Jijnasa.
Chattopadhyay, Saratchandra. Mejadidi.
Sen, Dineschandra. Asutosh-Smritikatha.
Mitra, Khagendranath. Sukh-Dukkha.

## SECOND LANGUAGES

### Sanskrit

### Text-books

(*Pass Course*)

*Paper I*

Manusamhita, Chapter I. (A knowledge of Kulluka's Commentary will be expected).
Bharavi, *either* Canto XIII *or* Canto XIV.

*Paper II*

Kalidasa. Abhijnana-Sakuntalam.
Bhasa. Pratimanatakam.

*Paper III*

Students recommended to consult the following books for the History of Sanskrit Literature :—

Winternitz. History of Indian Literature, Vol. I (published by the University), omitting the chapters on Vedic Literature.

Keith. A History of Sanskrit Literature (Oxford University Press).

Macdonell. History of Sanskrit Literature (only the chapters dealing with Sanskrit Drama).

Grammar recommended—

Bandyopadhyay, Devendrakumar. Panini-Pravesha Vyakaranam.

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

*Paper IV*

Bhattikavyam, Canto X.

Kadambari, pages 25-49 (Bombay Sanskrit Series, Peterson's edition—(from Ekasmin jirna kotare to sruyatam yadi kutuhalam).

*Paper V*

Vedic Selections (latest edition, published by the Calcutta University). Hymns to be read :—

(1) Hymn No. 1 Agni (I. 1.).
(2) ,, 3 Surya (I. 115).
(3) ,, 5 Indra (II. 12).
(4) ,, 6 Mitra and Varuna (V. 62).
(5) 7 Pusan (VI. 54).
(6) , 8 Yama (X. 14).
(7) ,, 9 Aksa (X. 34).
(8) ,, 10 Hiranyagarbha (X. 121).
(9) ,, 11 Devisukta (X. 125).

Satapatha Brahmana.

Manu. Matsya Katha.

Isa. Upanisad (Verses 1-10).

Svetasvatara Upanishad (Chap. III).

Students are recommended consult the following books :—

Macdonell. Vedic Grammar for Students.

Winternitz. History of Indian Literature, Vol. (published by the University)—Vedic period only.

*Paper VI*

Siddhanta Kaumudi-Karaka and Samasa.

Dandi. Kavyadarsa.

PALI

TEXT-BOOKS

(*Pass Course*)

B.A. Pali Selections (published by the Calcutta University). Pieces to be read :—

*Prose*

Majjhima Nikaya ; *Either* Dhammacetiya Sutta, *or* Bhaddekaratta Sutta *or* Aggi Vacchagotta Sutta.

Milindapanha, pages 37-72.

Atthakatha : *Either* Marriage of Visakha, *or* Quarrel between Ajatasattu and the Vijjis, Porana Vajidhamma.

*Poetry*

Dhammapada. The following vaggas :—Yamaka, Appamada, Citta, Puppha, Sahassa, Jara.

*Either* Alla *or* Magga *or* Danda *or* Naga *or* Brahmana.

(The Appamada and Sahassa Vaggas are to be read along with the Apamada-Vaga and Sahasa-Vaga of the Prakrit Dhammapada, published by the Calcutta University.)

Samyutta Nikaya. The following pieces :—Kutika, Jata, Acchara, Kavi, *Either* Sisupacala, *or* Vajira, *or* Vangisa.

Grammar and Comparative Philology—

Chas, Duroiselle. Pali Grammar.

Sanskrit Vyakaran (published by the Calcutta University).

The following Panchatantra pieces from the B.A. Pali Selections are to be read as illustrative texts :—

The Sparrows and the Roguish Elephant. The Tortoise and the Geese. The Pigeons and the Fowler. The Ass in the Tiger's Skin.

Woolner, A. C. Prakrit Grammar. Introduction to Prakrit (2nd edition), Chapters I-VII, omitting Chapter V.

The following pieces from Woolner are to be read as illustrative texts :—

Extracts 1, 2, 20 and 23 and Rock Edict I, and the Bhabru Edict from the B.A. Pali Selections.

Comparative Philology—(*a*) P. D. Gune. An Introduction to Comparative Philology. The following portions only :—Principles, Families of Languages, Pali and the Inscriptional Prakrits. (*b*) A. C. Woolner. Introduction to Prakrit. Portions dealing with Pali, in Chapter X, pages 71-73, and Chapter XI, pages 80-82.

(The Pass Course includes an elementary knowledge of Sanskrit and Prakrit Grammar besides a knowledge of Pali Grammar and the elements of Comparative Philology.)

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

B.A. Honours Pali Selections (published by the Calcutta University). Pieces to be read :—

*Prose*

Digha Nikaya. *Either* Last Journey of Buddha, *or* Problem of Future Existence, *or* Kutadanta Sutta.
Vibhanga. Paccayakara Vibhanga.
Vinaya Cullavagga. Pancassati Vinaya-Sangiti.
Samantapasadika. Legend of Asoka, Nos. 2, 4, *either* 5 *or* 6.

*Poetry*

Thera-Theri-Gatha. *Either* the Psalms of Talaputa, *or* the Psalm Isidasi.
Suttanipata. *Either* Brahmana-dhammika Sutta *or* Parayanavagga (Vatthugatha).
Soundaranda Kavya. Nanda Parivrajanan.
Chronicles. Acariyavadam.

HISTORY OF BUDDHISM

Davids, Rhys. Buddhist India.
Thomas, E. J. Life of Buddha.

GRAMMAR AND COMPARATIVE PHILOLOGY

Texts are the same as in the Pass Course.

(The Honours Course includes a knowledge of Sanskrit Grammar up to the Intermediate standard and of the History of Buddhism with special reference to India.)

## BENGALI

(*Pass Course*)

(*a*) Poetry Texts—80 marks

Sen, Dineschandra and Mitra, Khagendranath (compiled by). Vaishnab Padabali (latest edition, published by the Calcutta University). The whole.

*Either*, Bhattacharyya, Jatindramohan (edited by). Kshemananda Ketakadass Manasa-mangal (published by the Calcutta University). Pages 169-352.

*Or*, Bagchi, Jatindramohan. Mahabharati. Pieces to be read :—Karna ; Duryodhan ; Mahananda Math ; Bhakta Bhola and Vijaya only.

Ray, Amarendranath (compiled by). Sakta Padabali (latest edition, published by the Calcutta University). Portions to be read : —Agamani and Vijaya only.

Tagore, Rabindranath. Sonar Tari. Pieces to be read :—

Sonar Tari ; Hing Tingh Chhat ; Paraspathar ; Vaisnab Kabita ; Dui Pakhi ; Gan Bhanga ; Samudrer Prati ; Visva-nritya ; Mayabad ; Bandhan ; Mukti.

For reference only—

Padakalpataru.
Brajabasi, Nabadwip and Mitra Khagendranath (compiled by). Padamritamadhuri.
Chakrabarti, Ajitkumar. Kavyaparikrama.

(*b*) Metrics—20 marks

Mukhopadhyay, Amulyadhan. Bangala Chhander Mul-Sutra (latest edition, published by the Calcutta University).

*Paper II*

(*a*) Prose Text—75 marks

Trivedi, Ramendrasundar. Jijnasa. Pieces to be read :—

Sukh na Dukkha ; Satya ; Ke Bara ; Saundaryya Tattva.

*Either*, Chattopadhyay, Bankimchandra. Chandrasekhar.

*Or*, Chattopadhyay, Saratchandra. Srikanta-Pratham Parba.

Tagore, Rabindranath. Swadesh.

For reference only—

Sen, Sukumar. Bangla Sahitya Gadya (Revised edition).

(*b*) Criticism—25 marks

For reference only—

Mukhopadhyay, Asutosh. Jatiya Sahitya.

Tagore, Rabindranath. Sahitya.
Ray, Amarendranath (compiled by). Samalochana Sangraha (latest edition, published by the Calcutta University).
Gupta, Atulchandra. Kabya-Jijnasa.

*Paper III*

(*a*) Drama Text—80 marks

Ghosh, Girischandra. Nala-Damayanti.
Ray, Dwijendralal. Chandragupta.
Vidyabinode, Kshirodprasad. Pratap-Aditya.
For reference only—
Bhattacharyya, Kshetranath. Natak-O-Nataker Abhinay.
Basu, Jogindranath. Michael Madhusudan Datter Jiban-Charit, Chapters 8 and 9.
Dasgupta, Hemendranath. The Indian Stage.
Ray, Amarendranath. Giris Natya-Sahityer Baisistya (published by the Calcutta University).

(*b*) Rhetoric—20 marks

Books recommended—

Bidyanidhi, Lalmohan. Kabya-Nirnay (Alankar portion only).

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

*Paper IV*

(*a*) Additional Poetry Texts—80 marks

Kabisekhar, Balaram. Kalikamangal (Bangiya Sahitya Parishad).
Datta, Michael Madhusudan. Meghnad-badh. *Any one* of the Cantos 6, 7 and 9.
Tagore, Rabindranath. Manasi.
For reference only—
Dasgupta, Surendranath. Kavya Vichar.
Bandyopadhyay, Charu. Rabi-Rasmi.

(*b*) Unseen—20 marks

*Paper V*

Additional Prose Text—80 marks

*Either*, Vidyasagar, Iswarchandra. Sakuntala.
*Or*, Datta, Rameschandra. Jiban Prabhat.
Chattopadhyay, Bankimchandra. Bishabriksha.
Tagore, Rabindranath. Prachin Sahitya.

For reference only—

Tagore, Rabindranath. Sahityer Dharma.
Sen, Sasankamohan. Banimandir (published by the Calcutta University).
Bandyopadhyay, Srikumar. Banga-Sahitye Upanysager Dhara (latest edition, published by the Calcutta University).

(*b*) Unseen—20 marks

*Paper VI*

(*a*) Additional Drama Texts—80 marks

Ghosh, Girischandra. Pandab Gaurab.
Basu, Amritalal. Jajnaseni.
Tagore, Rabindranath. Bisarjan.

For reference only—

Same as in the Pass Course.

(*b*) Unseen—20 marks

**B.A. AND B.Sc. EXAMINATIONS, 1948**

ENGLISH

TEXT-BOOKS

(*Pass Course*)

Shakespeare. Macbeth.
Shakespeare. The Merchant of Venice.
Young, C. B. (Selected and Edited by). Great English Poems. Pieces to be read :—
From Milton to Browning with the exception of Dryden and Pope. The Poems of Shelley are to be read as alternative to those of Keats and the Poems of Tennyson as alternative to those of Browning.

*Prose*

*Any two* of the following three books :—

Charles Dickens. A Tale of Two Cities.
Bailey. Dr. Johnson and his Circle.
A Selection of Essays (published by the Calcutta University). The following pieces only :—
Lamb. The Superunnuated Man.
Bagehot. A Sensitive Agitator.
Whibley. New York.
Bryce. War and Human Progress.

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

Shakespeare. Hamlet.
Marlowe. Edward II (Oxford University Press).
Binyon. Golden Treasury, Book V. Only the Poems of the following author's are to be read :—
M. Arnold, R. Bridges, R. Brook, E. B. Browning, R. Kippling, G. Meredith, W. Owen, C. G. Rossetti, D. G. Rossetti, A. C. Swinburne, Lord Tennyson and W. B. Yeasts, T. Hardy, G. M. Hopkins.
Pater. Appreciations. The following pieces only are to be read :—
Wordsworth, Style, Charles, Lamb, Loves Labour Lost, Measure for Measure, Shakespeare's English Kings and D. G. Rossetti.
The following books are prescribed as text-books for studying the Philology of the English Language and the History of English Literature :—
Jespersen, Otto. Growth and Structure of the English Language (Blackwell).
Legonis, E. A Short History of English Literature (Clarendon Press, Oxford).
*Any two* of the following authors are to be studied in connection with the History of English Literature :—
(1) Spenser ; (2) Pope : (3) Browning ; (4) Donne.

## VERNACULARS

### Bengali

Text-books

Chattopadhyay, Bankimchandra. Kapalkundala.
*Either*, Datta, Michael Madhusudan. Meghnad Badh Kavya, Canto IV.
*Or*, Tagore, Rabindranath. Kalpana. Pieces to be read :—
Dussamay, Bangalakshmi, Jagadischandra Basu, Prakas, Asesh, Barshasesh, Asamaya, Baisakh.
*Either*, Mukhopadhyay, Sir Asutosh. Jatiya Sahitya. The following pieces only :—
(1) Mahakabi Michael Madhusudan Datta ; (2) Krittibas.
*Or*, Ray, Amarendranath. Samalochana Sangraha. The following pieces only :—
(*a*) Chattopadhyay, Bankimchandra. Dinabandhu Mitra.
(*c*) Sarkar, Akshaychandra. Jaydeb.
(*d*) Tagore, Rabindranath. Bankimchandra.
(*e*) Basu, Purnachandra. Ramprasad.
(*f*) Ray, Dwijendralal. Natakatwa.
The following books are recommended as showing the standard up to which candidates will be expected to have read :—
Nyayaratna, Ramgati. Bangla Bhasha-o-Sahitya Bishayak Prastab (4th edition, edited by Girindranath Bandyopadhyay).
Sastri, Sivanath. Ramtanu Lahiri-o-Tatkalin Bangasamaj.
Tagore, Rabindranath. Jibansmriti.
Mukhopadhyay, Bhudeb. Vividha Prabandha, Part II.
Datta, Hirendranath. Darsanik Bankimchandra.
Sen, Dineschandra. Asutosh-Smritikatha.
Mitra, Khagendranath. Sukh-Dukkha.

## SECOND LANGUAGES

### Sanskrit

Text-books

(*Pass Course*)

*Paper I*

Manusamhita, Chapter I. (A knowledge of Kulluka's Commentary will be expecetd)
Bharavi. *Either* Canto I *or* Canto XIV.

*Paper II*

Kalidasa. Abhijnana-Sakuntalam.
Bhasa. Pratimanatakam.

*Paper III*

Students are recommended to consult the following books for the History of Sanskrit Literature :—

Winternitz. History of Indian Literature, Vol. I (published by the Calcutta University), omitting the chapters on Vedic Literature

Keith. A History of Sanskrit Literature (Oxford University Press).

Macdonell. History of Sanskrit Literature (only the chapters dealing with Sanskrit Drama).

Grammar recommended—

Bandyopadhyay, Devendrakumar. Panini-Pravesha Vyakaranam.

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

*Paper IV*

Bhattikavyam, Canto X

Kadambari, pages 50-75 (Bombay Sanskrit Series, Peterson's edition). Beginning with Asti Sakala Tribhubana Lalamabhuta and ending in Kalabisheshesheshu Paran Kavsalamabapa.

*Paper V*

Vedic Selections (published by the Calcutta University). Selected pieces.

Students are recommended to consult the following books :—

Macdonell. Vedic Grammar for Students.

Winternitz. History of Indian Literature, Vol I (published by the Calcutta University). Vedic period only.

*Paper VI*

Siddhanta Kaumudi (Karaka and Samasa).

Dandi. Kavyadarsa.

PALI

TEXT-BOOKS

(*Pass Course*)

B.A. Pali Selections (published by the Calcutta University). Pieces to be read :—

*Prose*

Majjhima Nikaya. *Either* Bhaddekaratta Sutta, *or* Aggi-Vacchagotta. *Either* Ananda *or* Sandaka.

Milindapanha. Pages 37-72.

*Either* Atthakatha. *Either* Marriage of Visakha *or* Porans Vijjidhamma.

*Either* Enshrinement of Buddha's Relics by Ajatasatru *or* Enshrinement of Buddha's Relics by Asoka.

*Poetry*

Dhammapada. The following vaggas :—

Yamaka, Appamada, Chitta, Puppha, Sabassa, Jara, *Either* Atta, *or* Megga, *or* Danda, *or* Buddha, *or* Dhammattha.

(The Appamada and Sahassa Vaggas are to be read along with the Apamada-Vaga and Sahasa-Vaga of the Prakrit Dhammapada, published by the Calcutta University.)

Samyutta Nikaya. The following pieces :—Kutika, Jata, Acchara, Kavi, *Either* Sisupacala, *or* Vajira, *or* Vangisa.

GRAMMAR AND COMPARATIVE PHILOSOPHY

Duroiselle, Chas. Pali Grammar.

Samskrita-Vyakarana-Pravesika (latest edition, published by the Calcutta University)

The following Panchatantra pieces from the B.A. Pali Selections are to be read as illustrative texts :—

The Sparrows and the Roguish Elephant. The Tortoise and the Geese. The Pigeons and the Fowler. The Ass in the Tiger's Skin.

Woolner, A. C. Prakrit Grammar. Introduction to Prakrit (2nd edition), Chapters I-VII, omitting, Chapter V.

The following pieces from Woolner are to be read as illustrative texts :—

Extracts 1, 2, 20 and 23 and Rock Edict I, and the Bhabru Edict from the B.A. Pali Selections.

Comparative Philology—(*a*) P. D. Gune. An Introduction to Comparative Philology. The following portions only :—

Principles, Families of Languages, Pali and the Inscriptional Prakrits.

(*b*) Woolner, A. C. Introduction to Prakrit. Portions dealing with Pali, in Chapter X, pages 71-73, and Chapter XI, pages 80-82.

(The Pass Course includes an elementary knowledge of Sanskrit and Prakrit Grammar besides a knowledge of Pali Grammar and the elements of Comparative Philology.)

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

B.A. Honours Pali Selections (published by the Calcutta University). Pieces to be read—

*Prose*

Digha Nikaya. *Either* Great Decease of Buddha, *or* Problem of Future Existence, *or* Kutadanta Sutta.

Vibhanga. Sacca-Vibhanga.

Vinaya Cullavagga. Pancasati Vinaya-Sangiti.

Samantapasadika. Lengend of Asoka, Nos. 2, 4, *Either* 5 *or* 6.

*Poetry*

Thera-Theri-Gatha. *Either* The Psalms of Talaputa *or* the Psalms of Ambapali.

Suttanipata. *Either* Brahmana-dhammika Sutta *or* Nalaka Sutta (Vattugatha and the Discourse).

Saundarananda Kavya. Nanda-Parivrajanam.

Chronicles. Acariyavandam.

HISTORY OF BUDDHISM

Davids, Rhys. Buddhist India.

Thomas, E. J. Life of Buddha.

GRAMMAR AND COMPARATIVE PHILOLOGY

The texts are the same as in the Pass Course.

(The Honours Course includes a knowledge of Sanskrit Grammar up to the Intermediate standard and of the History of Buddhism with special reference to India.)

## VERNACULARS

(*Pass and Honours Course*)

### BENGALI

(*Pass Course*)

*Paper I*

(*a*) Poetry Texts—80 marks

Sen, Dineschandra and Mitra, Khagendranath (compiled by). Vaishnab Padabali (latest edition, published by the Calcutta University). The whole.

*Either*, Kshemananda Ketaka Das. Manasha-Mangal (latest edition, published by the Calcutta University). Pages 169-352.

*Or*, Majumdar, Mohillak. Kavya Manjusha. Pieces to be read :—

Syamsundar, Siber Dakshalaya Jatra, Bankim-biday, Daridrer Swapna, Prarthana (Rabindranath Tagore), Kanthali Champa, Chashar Ghare, Charbak-o-Manjubhasha.

Ray, Amarendranath (compiled by). Sakta Padabali (latest edition, published by the Calcutta University). Selected pieces only.

Tagore, Rabindranath. Sonar Tari. Selected pieces only.

For reference—

Padakalpataru.

Brajabasi, Nabadwip and Mitra, Khagendranath (compiled by). Padamritamadhuri.

Chakrabarti, Ajitkumar. Kavyaparikrama.

(*b*) Metrics—20 marks

Mukhopadhyay, Amulyadhan. Bangala Chhander Mulsutra (latest edition, published by the Calcutta University).

For reference—

Sen, Prabodhchandra. Chhanda-Guru Rabindranath.

Majumdar, Mohitlal. Bangla Kavitar Chhanda.

*Paper II*

(*a*) Prose Text—75 marks

Trivedi, Ramendrasundar. Jijnasa (selected pieces).

*Either*, Chattopadhyay, Bankimchandra. Chandrasekhar.

*Or*, Chattopadhyay, Saratchandra. Srikanta (Pratham Parba).

Tagore, Rabindranath. Swadesh.

For reference—

Sen, Sukumar. Bangla Sahitye Gadya (Revised edition).

(*b*) Criticism—25 marks

For reference—

Mukhopadhyay, Asutosh. Jatiya Sahitya.

Tagore, Rabindranath. Sahitya.

Ray, Amarendranath (compiled by). Samalochana Sangraha (latest edition, published by the Calcutta University).

Gupta, Atulchandra. Kabya-Jijnasa.

*Paper III*

(*a*) Drama Texts—80 marks

Ghosh, Girischandra. Nala-Damayanti.
Ray, Dwijendralal. Shah Jahan.
Vidyabinod, Kshirodprasad. Pratap-Aditya.

For reference—

Bhattacharyya, Kshetranath. Natak-o-Nataker Abhinay.
Basu, Jogindranath. Michael Madhusudan Datter Jibancharit, Chapters 8 and 9.
Dasgupta, Hemendranath. The Indian Stage.
Ray, Amarendranath. Giris Natya-Sahityer Baisishtya (published by the Calcutta University).

(*b*) Rhetoric—20 marks

Books recommended—

Bidyanidhi, Lalmohan. Kavya-Nirnay (Alankar portion only).

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

*Paper IV*

(*a*) Additional Poetry Text—80 marks

Sen, Sukumar (edited by). Ruparam's Dharmamangal (Burdwan Sahitya Sabha).
Datta, Michael Madhusudan. Meghnad-badh. *Any one* of the Cantos 6, 7 and 9.
Tagore, Rabindranath. Manasi.

For reference—

Dasgupta, Surendranath. Kavya Vichar.
Bandyopadhyay, Charu. Rabi-Rasmi.

(*b*) Unseens—20 marks

*Paper V*

(*a*) Additional Prose Text—80 marks

*Either*, Vidyasagar, Iswarchandra. Sakuntala.
*Or*, Datta, Rameschandra. Jiban Sandhya.
Chattopadhyay, Bankimchandra. Bishabriksha.
Tagore, Rabindranath. Prachin Sahitya.

For reference—

Tagore, Rabindranath. Sahityer Dharma.
Sen, Sasankamohan. Banimandir (published by the Calcutta University).
Bandyopadhyay, Srikumar. Banga-Sahitye Upanyaser Dhara (latest edition, published by the Calcutta University).

(*b*) Unseens—20 marks

*Paper VI*

(*a*) Additional Drama Texts—80 marks

Ghosh, Girischandra. Pandab Gaurab.
Basu, Amritalal. Jajnaseni.
Tagore, Rabindranath. Raja-o-Rani.

For reference—

Same as in the Pass Course.

(*b*) Unseen—20 marks

Senate House,
*The 2nd December*, 1946.

B. B. DUTT,
*Registrar (Offg.)*.

Notification No. T.748

It is hereby notified for general information that the following reduced course has been prescribed in Arabic, Persian and Urdu for the Matriculation Examination, 1947 and 1948.

## MATRICULATION EXAMINATION, 1947

### Major Vernacular

URDU

Matriculation Urdu Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

*Either*, Banatunnash, pages 1-21.
Aina-i-Ibrat, pages 120-148.
*Either*, Iusha-i-Hadi-un-nissa, pages 101-108.

*Or*, Urdu-i-Mualla, pages 109-119.
Other pieces—same as mentioned in Notification No. T.691, dated rhe 30th October, 1944.

*Poetry*

Selections from—
*Either*, Kulliyat-i-Zafar, pages 107-113 and Rubbauyat of Anis, pages 114-118.
*Or*, Akbar, pages 141-154.
*Either*, Kulliyat of Ismail, pages 180 middle to 191.
*Or*, Mussadas-i-Hali, pages 127-140.
Other pieces—same as mentioned in Notification No. T.691, dated the 30th October, 1944.
Book prescribed for Rapid Reading—
Same as mentioned in Notification No. T.691, dated the 30th October, 1944.

**Second Languages**

ARABIC

Matriculation Arabic Selections (1941 edition, published by the Calcutta University). to be read :—

*Prose*

*Either* Alfu Layla, pages 236-247.
*Or*, Tarikhi Tabari, pages 199-216.
Other pieces—same as mentioned in Notification No. T.691, dated the 30th October, 1944.

*Poetry*

same as mentioned in Notification No. T.691, dated the 30th October, 1944.

PERSIAN

Matriculation Persian Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

*Either*, Safar Nama, pages 35-52.
*Or*, Humayun Nama, pages 102-114.
Other pieces—same as mentioned in Notification No. T.691, dated the 30th October, 1944.

*Poetry*

*Either*, Ibu Yamin—Muqattat, pages 85-102.
*Or*, Ghazals of Hassan. Only the Ghazals ending in Radif, Mim, Num, Waw, ha and Ya (pages 134 (middle)-146).
Other pieces—same as mentioned in Notification No. T.691, dated the 30th October, 1944.

**Indian Vernacular**

URDU

Same as mentioned in Notification No. T.691, dated the 30th October, 1944.

**MATRICULATION EXAMINATION, 1948**

**Major Vernacular**

URDU

Matriculation Urdu Selections (1946 edition, published by the Calcutta University). P ieces to be read :—
*Either*, Banatunnas, pages 1-23.
*Or*, Aina-i-Ibrat, pages 87-118.
Other pieces—same as mentioned in Notification No. T.742, dated the 18th June, 1946.

*Poetry*

*Either*, Kulliyat-i-Zafar and Rubbaiyyat of Anis.
*Or*, Akbar.
Other pieces—same as mentioned in Notification No. T.742, dated the 18th June, 1946.
Books prescribed for Rapid Reading :—
Same as mentioned in Notification No. T.723, dated the 10th October, 1945.

**Classical Languages**

ARABIC

Matriculation Arabic Selections (1941 edition, published by the Calcutta University). Pieces to be read :—

*Prose*

*Either*, Tarikhi Tabari, pages 199-216.
*Or*, Alfu Layla, pages 236-247.

Other pieces—same as mentioned in Notification No. T.723, dated the 10th October, 1945.

*Poetry*

Same as mentioned in Notification No. T.723, dated the 10th October, 1945.

PERSIAN

Matriculation Persian Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Either*, The Safar Nama.

*Or*, Humayun Nama.

Other pieces—same as mentioned in Notification No. T.723, dated the 10th October, 1945.

*Poetry*

*Either*, Ibn Yamin-Mugattat.

*Or*, The Ghazals of Hassan.

Other pieces—same as mentioned in Notification No. T.723, dated the 10th October, 1945.

**Alternative Vernacular**

URDU

No Change

Senate House,
*The 17th December*, 1946.

B. B. DUTT,
*Registrar* (*Offg.*).

Notification No. T.749

It is hereby notified for general information that the following reduced course has been prescribed in Arabic, Persian and Urdu for the Intermediate Examination, 1947.

**I.A. AND I.Sc. EXAMINATIONS, 1947**

**Vernacular**

URDU

Intermediate Urdu Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

*Either*, Selections from the Makhzan, pages 124-154.

*Or*, Qadim Sayyahan-i-Hindustan, pages 76-106.

Other pieces—same as mentioned in Notification No. T.696, dated the 18th December, 1946.

*Poetry*

*Either*, Selections from Hasrat, pages 373-392.

*Or*, Selections from Iqbal, pages 49-433.

Other pieces—same as mentioned in Notification No. T.699, dated the 18th December, 1946.

**Second Languages**

ARABIC

Intermediate Arabic Selections (Calcutta University Publication, 1943 edition).

*Prose*

*Either*, Selections from Kalilawa Dimng, pages 102-119.

*Or*, Selections from Kitabul Mahasini Wal Masawi, pages 174-185.

Other pieces—same as mentioned in Notification No. T.696, dated the 18th December, 1944.

*Poetry*

Same as mentioned in Notification No. T.696, dated the 18th December, 1944.

*Special paper in Arabic in lieu of a paper in vernacular*

Same as mentioned in Notification No. T.696, dated the 18th December, 1944.

PERSIAN

Intermediate Persian Selections (Calcutta University Publication, 1942 edition). Pieces to be read :—

*Prose*

*Either*, Riyadus Salatin, pages 89-97.

*Or*, Nigaristan, pages 98-106.

Other pieces—same as mentioned in Notification, No. T.696, dated the 18th December, 1946.

*Poetry*

*Either*, Laila Majnun, pages 184-194.
*Or*, Qasaid-i-Salman Sawdji, pages 236-246.
Other pieces—same as mentioned in Notification No. T.696, dated the 18th December, 1944.

*Special paper in Persian in lieu of a paper in Vernacular*

No Change

URDU

TEXT-BOOKS

*Prose*

Serat-i-Aisha by S. Sulayman Nadwi, pages 21-90, omitting Arabic Quotations.

*Poetry*

Manazir-i-Qudrat by Illyas Barani, Vol. I, pages 102 (middle)-120.

Senate House,
*The 17th December*, 1946.

B. B. DUTT,
*Registrar (Offg.)*.

Notification No. T.750

It is hereby notified for general information that the following reduced course has been prescribed in Arabic, Persian and Urdu for the B.A. Examination, 1947.

**B.A. Exafflination, 1947**

**Vernacular**

URDU

TEXT-BOOKS

S. Sulayman Nadwi. Nuqushi Sulaymani (Edn. 1939), pages 1-99.
Anis, Marathi.—The following Marthiyyas only (may be found in the Ruh-i-Anis' of Masud Hasan Rizqi, published by the Indian Press, Ltd., Allahabad).
(*a*) Marthiyya beginning with :—

بخدا فاوس میدان تهور تها حر
ایک دو لاکهه سوارون مین بهادر تها حر

(Marthiyya 1, pages 3-31 of Ruh-i-Anis.)

*Either* (*b*) Marthiyya beginning with :—

جاتي هے کس شکوه سے رن مین خدا کي فوج
کهڑي وغا په باندهے هے مشکلکشا کي فوج

(Marthiyya 2, pages 32-68 of Ruh-i-Anis.)

*Or* (*c*) Marthiyya beginning with :—

جب قطع کي مسافت شب آفتاب نے
جلوه کيا سحر کے رخ بے حجاب نے

(Marthiyya 7, pages 197-236 of Ruh-i-Anis.)

Recommended for General Reading—

Shibli. Muqazanai-Anis wa Dabir.
Mohammad Ismail. Tazkira-i-Hali.

ALTERNATIVE PAPER IN URDU

(To be taken up by the candidates who take up Urdu as Second Lanauge)

(*a*) History of Literature—50 marks

Books recommended

Syed Muhammad. Arbab-i-Nasri Urdu (the whole).
Azad. Ab-i-Hayat (Islamia Steam Press, Lahore Edition, 1917). The following chaptesr only :—Nazm-i-Urdu ki Tarikh. " Panchvan Daur."

(*b*) History of Language—25 marks

Azad. Ab-i-Hayat. The following chapter only :—Urdu Zaban ki Tarikh.

## Second Languages

### ARABIC

TEXT-BOOKS

*(Pass Course)*

University Selections in Arabic for the B.A. Examination (Calcutta University Publication, 1941 edition). Pieces to be read :—

*Prose*

*Either* Selections from the Tafsir, pages 11-25.
*Or* Selections from al-Bayanu-wal-Tabyin, pages 47-59.
Selections from the Ihyaul-'Ulum, pages 152-167.
Selections from the Rannatul—Mathalithi wal Mathani, pages 88-151.
Majanil-Adab, pages 259 (middle)-274.

*Poetry*

Selections from Kitab-al-Hamasa, pages 331-375.

*Either* Selections from the Diwan of al-Mutanabbi, pages 392-412.
*Or* Selections from Diwan-Ahmad Shauqui, pages 432-455.

*(Honours Course)*

Calcutta University Selections (Edition of 1915), omitting pages 85-94 and 95-119 only.
(The Honours Course in Arabic also includes the elements of Arabic Prosody and Rhetoric, the outlines of Mahammadan History down to the Fall of the Abbasid Caliphate, and a general knowledge of the History of Arabic Literature.)

*History of Arabic Literature*

Gibb, H. A. R. History of Arabic Literature.

*Muhammadan History*

Ali, Ameer. A Short History of the Saracens, pages 1-401 (omitting Chapters VI and XIV).

*Rhetoric and Prosody (Pass and Honours Course)*

The following books are recommended for an elementary knowledge of Rhetoric and Prosody :—
(1) Cheiko (Beirut). Ilm-ul-Adab, Volume I (chapters on Balaghat Bayan Tahsin-ul-Insha and 'Aruz only).
(2) Palmer. Arabic Grammar, Part III (Prosody) only.
(3) Abdul Majid. Jadid Ilmu'l Balaghat and Ilmu'l 'Aruz (published by Lala Ram Narain Lal, Allahabad).

### PERSIAN

TEXT-BOOKS

*(Pass Course)*

University Selections in Persian for the B.A. Examination (Calcutta University Publication, latest edition). The following pieces are to be read :—

*Prose*

Selections from the Tarikh-i-Tabari (pages 1-22).
Selections from the Masalik-ul-Muhsinin (pages 185-206 middle). Abraham Lincoln (pages 236-264).
*Either* Selections from the Kimya-i-Saadat, pages 50-71.
*Or* Selections from the Khizana-i-'Amira, pages 160-184 (middle).
Selections from the Khulasatul Tawarikh, pages 145-150.

*Poetry*

Selections from the Ashar of Rudaki (pages 149-153).
Selections from the Ghazaliyyat of Hafiz (pages 173-195).
*Either* Selections from the Ghazaliyyat of Brahman (pages 106-203).
*Or* Selections from the Ghazaliyyat of Saib (pages 204-214).
Selections from the Qasaid of Kamaluddin Ismail (pages 242-259).
Selections from the Mathnawi of Rumi (pages 54-75 middle).
Selections from the Shahnama of Firdausi (pages 3-23 top).
The Rustakhiz (pages 284-300).

*(Honours Course)*

(In addition to the pieces selected for the Pass Course)

B.A. Honours Persian Course (Calcutta University Publication, edition of 1913, omitting pages 38-50, 65-75, 76-91 and 167-224).

(The Honours Persian Course includes the outlines of Muhammadan History (in so far as it relates to Iran, Central Asia and India, and the History of Persian Literature.)

*Rhetoric and Prosody (Pass and Honours Course)*

The following books are recommended to be read for an elementary knowledge of Rhetoric and Prosody :—

(1) Haq, M. Ziaul. The Elements of Persian Rhetoric and Prosody.

(2) Aziz, Sufi Abdul. Persian Rhetoric and Prosody (published by Atma Ram and Sons, Lahore).

(3) Majid, Abdul. Jadid 'Ilmu'l Balaghat and Ilmu'l 'Aruz (published by Lala Ram Narain Lal, Allahabad).

*History of Islam and History of Persian Lietrature*

(*Honours Course*)

The following books are recommended to be read for the general knowledge of the History of Persian Literature and of Iran, Central Asia and India :—

Levy, R. History of Persian Literature.

The article on ' Persia ' in the Encyclopaedia Britannica (14th Edition) (Political History portion only).

URDU

(*Pass Course*)

*Paper I*

(*a*) Old Poetry Texts—50 marks

Mir. Kulliyat Ghazals (Second Diwan—Radif-i-Alif only).
Dard. Diwan, Ghazals (Radif Alif and Dal only).

(*b*) Modern Poetry Texts—50 marks

*Either* Ghalib. Ghazals (Radif-i-Alif to Radif-i-Dal only).
*Or* Josh. Musaddas, Hussain aur Inqilab.
Hali. Chup ki Dad.
Iqbal. Taswir-i-Dard.

*Paper II*

(*a*) Prose Texts (Old and Modern)—75 marks

Araish-i-Mahfil or Qissa-i- Hatim Tai by Haidari—Ed. Cawnpor—1938, pages 2-34 (omitting page 23, line 1, page 27, page 28, line 21, and page 24, line 2).
Rashid-al-Khayri-Subh-i-Zindgi.

(*b*) Translation from English into Urdu—25 marks

*Paper III*

(*a*) Drama—80 marks

*Either* Ruswa, Dr. Murraqqai-Laila wa Majnun.
*Or* Husain, Dr. Abid. Parda-i-Ghaflat.

(*b*) Rhetoric—20 marks

Books recommended—
Ghulam, Mohiyuddin. Taqwimul Aruz wal Qafia.
Majeed, Abdul. Jadid Ilm-ul-Balaghat (Lala Ram Narain Lal, Allahabad).

(*Honours Course*)

(In addition to the books prescribed for the Pass Course)

*Paper IV*

(*a*) Additional Poetry Texts—80 marks

Mir. Masnawis (selected by Sir Shah Md. Suleman).

(*Either* the first-half *or* the second-half)

Atash-Kulliyat. Ghazals (Radif-i-Nun only).
Zauq. Three Qasidas (Marked Nos. 6, 12 and 13 in Sir Shah Md. Suleman's edition and beginning with the following lines :—

*Either* (First 23 couplets only) رہے نشاط اگر کیجئے اے تحریر

*Or* (20 couplets) طرب افزا ہے وہ روز کا نارنجي رنگ

(32 couplets) ہے آج جو یوں خوشنما نور شعر رنگ شفق

Iqbal. Shikwa.

(*b*) Unseen (Poetry)—20 marks

(*a*) Additional Prose Texts—80 marks

Shibli. Sirat-un-Nabi, Vol. I (to the end of the Battle of Badr) (pages 1-336, 2nd edition).
Sharer. Ayyam-i-Arab.

(*b*) Unseen (Prose)—20 marks

*Paper VI*

(*a*) Principles of Literary Criticism—50 marks

Books recommended—

Hali. Muqaddama-i-Shir-o-Shairi.
Zor. Ruh-i-Tanqid.
Shibli. Mowazana-i-Anis-o-Dabir (Introduction only).
Hasan, Masud. Hamari Shairi.
Hudson, W. H. Study of Literature.

(*b*) Prosody—20 marks

Books recommended—

Yas. Aruz-o-Qawafi.
Majeed, Abdul. Jadid Ilm-ul-Aruz (Lala Ram Narain Lal, Allahabad).

(*c*) Essay in Urdu—30 marks

All Urdu books are available from Hali Publishing House, Urdu Bazar, Delhi.

Senate House,
*The 18th December*, 1946.

B. B. DUTT,
*Registrar (Offg.)*.

Notification No. T.751

It is hereby notified for general information that the following revised pieces have been prescribed to be read from the Matriculation Hindi Selections for the Matriculation Examination of 1947 and 1948.

**Matriculation Examination, 1947**

**(Major Vernacular)**

HINDI

Matriculation Hindi Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

Raja Shiva Prasad. Maharani Damayanti.
Das, Shyamsundar. Bharatendu Harischandra.
Sri Premchandra. Sajjanta ka Danda.
Lala, Shibnarayan. Sir Asutosh Mukhopadhyay.
Tripathi, Ramnaresh. Season Dull Hai.
Sri Sudarsan. Amar Jeewan.
Ugra, Bechan Sarma. Ghore ki Jeewani.
*Either* Mishra, Balbhadraprasad. Ramayan ke Patron par Dharmasankat aur unka Nirbah.
*Or* (*a*) Gopalram Gahmari. Natak aur Upanyas.
(*b*) Padmasingh Sharma. Bhagwan Srikrishna.
(*c*) Ambica Datta Vyas. Kshama.

*Poetry*

Narottamdas. Sudama-Charit.
Tulsidas. Parasuram-Lakshman Sambad.
Giridhar. Niti Samayik Upadesha.
Chaudhury, Badrinarayan. Mayanka-mahima.
Lala Bhagwandin. Chandni.
Gupta, Maithili Saran. Matribhumi.
Tripathi, Ramnaresh. Anweshan.
Mahto, Mohanlal. Ansu.
*Either* Ayodhya Singh Upadhyay. Priyaprabas.
*Or* (*a*) Subhadrakumari Chauhan. (*i*) Mere Naya Bachpan, (*ii*) Balika ka Parichaya.
(*b*) Ramdhari Singh Dinakar. Himalay.
*Either* Mathuram Sankar Sharma. Ranka Rodan.
*Or* Brinda. Brinda ke Dohe.

**Matriculation Examination, 1948**

**Major Vernacular**

HINDI

TEXT-BOOKS

Matriculation Hindi Selections (latest edition, published by the Calcutta University). Pieces to be read :—

*Prose*

Bharatendu Harischandra—Andher Nagri. Pt. Mohabir Prasad Dwivedi—Bhishma ki Sarshayya. Shyamsundar Das—Bharatendu Harischandra. Sri Premchandra—Sajjanta

ka Danda. Shibnarayan Lala—Sir Asutosh Mukhopadhyay. Ramnaresh Tripathi—Season Dull Hai. Sri Sudersan—amr Jeewan. Bhecan Sarma Ugra—Ghore ki Jeewani.

*Either* Balbhadraprasad Misra. Ramayan ke Patron par Dharmasankat aur unka nirvah.
*Or* (*a*) Gopalram Ghamari. Natak aur Upanyas.
(*b*) Padmasingh Sarma. Bhagwan Srikrishna.
(*c*) Ambica Datta Vyas. Kshama.

*Poetry*

Kabir Sahib Chetawani—Updesh; Kam; Krodh; Lobh; Moh; Ahankar. Tulsidas—Vinay Patrika. Giridhar—Niti Somayik Upadesha. Badrinarayan Chaudhury—Mayanka mahima. Pt. Mannan Dwivedi Gazpuri—Chameli. Maithili Saran Gupta—Matribhumi Ramnaresh Tripathi—Anweshan. Sia Ram Saran Gupta—Ghat.

*Either* Ayodhya Singh Upadhyay. Priyaprabas.
*Or* (*a*) Subhadrakumari Chauhan. (*i*) Mere Naya Bachpan, (*ii*) Balika Ka Parichaya
(*b*) Ramdhari Singh Dinkar. Himalaya.
*Either* Nathuram Shankar. Rankarodan.
*Or* Brinda. Brinda ke Dohe.

Senate House,
*The* 18*th December*, 1946.

B. B. DUTT,
*Registrar* (*Offg.*)

Notification No. T.752

It is hereby notified for general information that the following revised course has been prescribed in Hindi for the Intermediate Examinations, 1947 and 1948.

**Intermediate Examination, 1947 and 1948**

**Vernacular, 1947 and 1948**

HINDI

Intermediate Hindi Selections (latest edition, published by the Calcutta University) The whole book with the following modifications :—

*Prose*

*Either* Madhabprasad Misra. Ramlila.
*Or* Purashattamdas Tandon. Bhishmastame.
*Either* Mohabir Prasad Dur Vedi. Kavi aur Kavita.
*Or* Purna Singh. Acharan Ki Sabhyata.
*Either* Kesab Prasad Singh. Appaltion ka Parbat.
*Or* Ramchandra Shukla. Utsaha.

*Poetry*

*Either* Maithili Saran Gupta. Vikat Bhat.
*Or* Jagannathdas Ratnakar. (*i*) Sri uddhab ko Mathura se Braj bhejte Samaya ke Kavitta (*ii*) Sumitranandan Pant. Balapan.
*Either* Ayodhyar Singh Upadhyay. Yasodabilap.
*Or* Satyanarayan Kaviratna. Bharamar Dut.

**Second Language, 1947**

HINDI

TEXT-BOOKS

*Prose*

Any *two* of the following three books :—
Hindi Nibandhamala, Part II (Indian Press, Allahabad).
Sukla, Ramchandra. Chintamani (Indian Press, Allahabad).
Varma, Brindabanlal. Kundali Chakra (Ganga Pustakmala, Lucknow).

*Poetry*

Any *one* of the following two books :—
Gupta, Maithili Saran. Siddha Raja.
Tripathi, Vishwanath. Kavyanjali (Gopal Publishing House, Patna).

Grammar and Composition recommended—
Bajpai, Pandit Ambikaprasad. Abhinaw Hindi Vyakaran.
Sarah, Rāmlochan. Rachana Chandroday (Pustak Bhandar, Laheriasarai), revised enlarged and improved edition.

**Alternative Vernacular, 1948**

HINDI

(*a*) Poetry Text—65 marks

Any *one* of the following :—
Gupta, Maithili Saran. Siddha Raja.
Tripathi, Vishwanath. Kavyanjali (Gopal Publishing House, Patna).

Rhetoric and Prosody—20 marks

Unseen—15 marks

(*b*) Prose Text—65 marks

Any *two* of the following :—

Hindi Nibandhamala, Part II (Indian Press, Allahabad).
Sharma, Brajbhushanlal. Jijnasa.
Varma, Brindabanlal. Kundali Chakra (Ganga Pustakmala, Lucknow).

Essay—20 marks

Unseen—15 marks

Senate House,
*The 18th December*, 1946.

B. B. DUTT,
*Registrar (Offg.)*.

Notification No. T.753

It is hereby notified for general information that the marks in Persian for the B.A. Examination (Pass and Honours) shall be distributed as follows in accordance with Chapter XXXII, pages 209-210 of the University Regulations (Edition of 1945).

*Pass Course*

| | | | |
|---|---|---|---|
| Paper I | (*a*) | Questions on the Poetry texts .. .. .. | 75 marks |
| | (*b*) | Eelementary Rhetoric and Prosody .. .. .. | 25 ,, |
| Paper II | (*a*) | Questions on the Prose texts .. .. .. | 70 ,, |
| | (*b*) | Translation from English into Persian .. .. .. | 30 ,, |
| Paper III | (*a*) | Unseen Prose & Poetry Passages .. .. .. | 50 ,, |
| | (*b*) | Outlines of the History of Persian Literature .. .. | 50 ,, |

The unseen passages in this paper shall be of no greater difficulty than the texts prescribed for the Intermediate Examination.

*Honours Course*

| | | | |
|---|---|---|---|
| Paper I | (*a*) | Questions on the Pass Poetry texts .. .. .. | 80 marks |
| | (*b*) | Elementary Prosody .. .. .. .. | 20 ,, |
| Paper II | (*a*) | Questions on the Pass Prose texts .. .. .. | 70 ,, |
| | (*b*) | Translation from English into Persian .. .. .. | 30 ,, |
| Paper III | (*a*) | Unseen Prose and Poetry passages .. .. .. | 50 ,, |
| | (*b*) | Outlines on the History of Persian Literature .. .. | 50 ,, |
| Paper IV | (*a*) | Questions on the Honours Poetry texts .. .. | 100 ,, |
| Paper V | (*a*) | Questions on the Honours Prose texts .. .. .. | 80 ,, |
| | (*b*) | Elementary Rhetoric .. .. .. .. | 20 ,, |
| Paper VI | (*a*) | Outlines of the History of Islam in Iran and India .. | 50 ,, |
| | (*b*) | Translation from English into Persian .. .. .. | 20 ,, |
| | (*c*) | An Essay in English or Persian on a subject connected with the History of Islam or the History of Persian Literature .. | 30 ,, |

In Papers I, II, IV and V, questions on the texts shall comprise :—
(*a*) Passages of the set texts for translation into English.
(*b*) Questions on the subject-matter, and
(*c*) Questions on the Grammar of the set passages.

In no paper shall more than one-fourth of the marks of these questions be assigned to the mere translation of set passages.

The above changes will be given effect to from the B.A. Examination, 1947.

Senate House,
*The 21st December*, 1946.

B. B. DUTT,
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*Kundan Lal Saigal, the golden-voiced idol of the Indian screen, was born at Srinagar in 1906. For some time he served the Govt. of India and N. W. Railway. He joined the New Theatres in 1931, and ever since has been delighting his countrymen with the most popular song-hits. Perhaps in no other role did his musical genius find such spontaneous expression as in that of "Tansen".*

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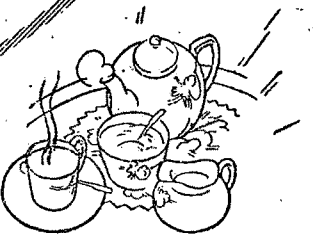

*For Inspiration...* **tea**

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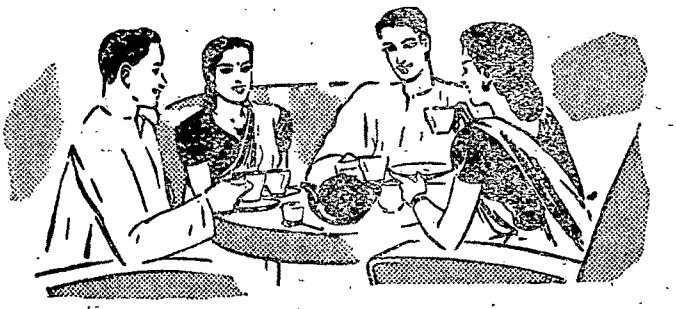

WHATEVER the occasion, tea is almost certain to be an honoured guest. Whether it is an informal gathering of two or three old friends or a formal celebration, tea can be relied upon to spread its kindly offering of sociability.

As with most things, there is a right and a wrong way of making tea. For one's guests only the best is good enough and the conscientious host will see to it that the 'right' way of making tea is always followed.

**HOW TO MAKE GOOD TEA**

1 Don't brew your tea in the kettle. Use a teapot for brewing.

2 The teapot should be warm and dry when you put in the dry tea. This assures correct infusion and flavour.

3 Put one teaspoonful of fresh dry tea leaves for each cup and one extra for the pot.

4 Use only freshly boiled water—never water that has been previously boiled, under-boiled or over-boiled. Water is boiling when it is bubbling and *not* before.

5 The time for infusion is not less than five minutes.

6 Don't add sugar and milk while the tea is still in the pot, but only after it is poured out in cups.

ANY TIME IS TEA TIME

**tea**

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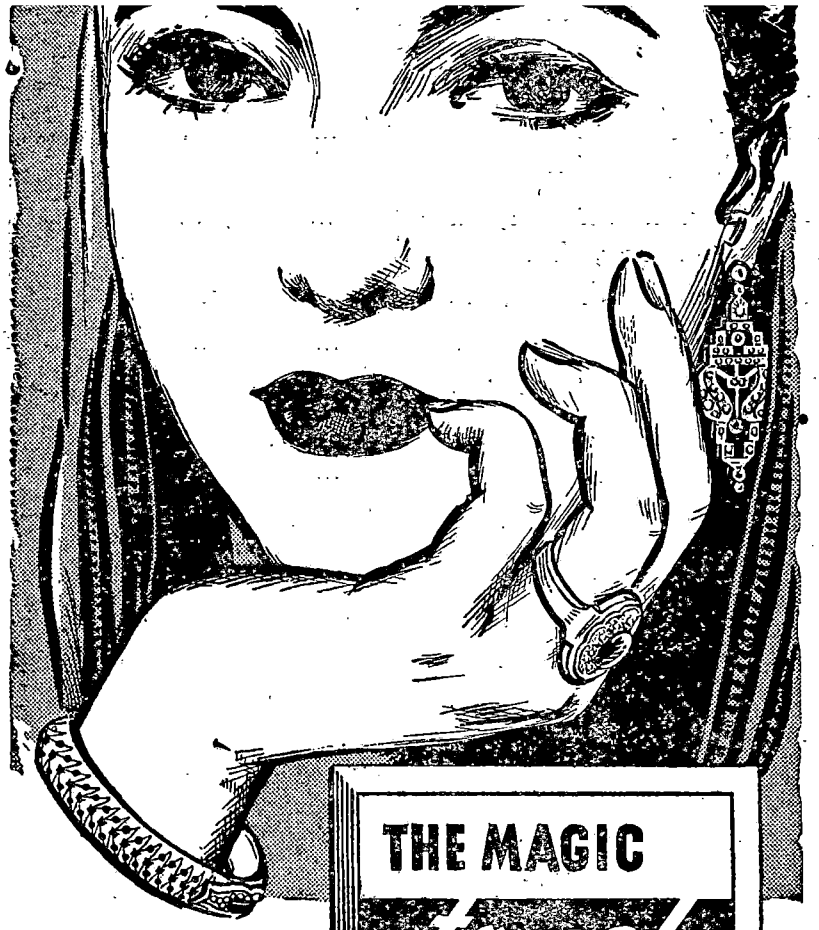

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IT has been said of Dr. Johnson, perhaps the most celebrated tea-drinker of all times, that he considered his mind good for little without tea. Anywhere he went, anything he did, he always turned to a strong infusion of this fragrant leaf to quiet his troubled mind and fortify his spirit. To many other men of genius who stamped their names indelibly on the intellectual life of their days—Hazlitt, Lamb and, of course, Cowper, "the tea-table poet of English letters," tea was more than a drink ; it was comfort, solace and inspiration all blended together.

This association of tea with literary tradition is no longer confined to English letters only. It is universal to-day. Read what **Tarashankar Banerjee**, the rising star in Bengali fiction, says of tea :

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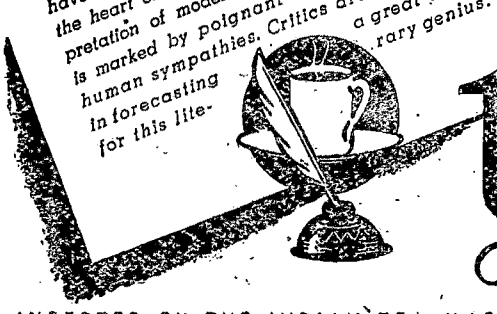
*Tarashankar Banerjee*

*Born at Labpur in the district of Birbhum in 1898, Tarashankar Banerjee has appeared like a meteor in the horizon of Bengali fiction. His* ***Kalindi, Dhatri Devata*** *and* ***Dui Purush*** *have already proved best-sellers and have won the heart of his fellow country men. His interpretation of modern Bengali life and society is marked by poignant realism and broad human sympathies. Critics are unanimous in forecasting a great career for this literary genius.*



# tea

*for inspiration*

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